DOCUMENT RESUME

ED 041 123 VT 011 247

AUTHOR	Barocci, Thomas A.
TITLE	Curriculum Initiation in Wisconsin Vocational and Technical Schools.
INSTITUTION	Wisconsin Univ., Madison. Center for Studies in Vocational and Technical Education.
PUB DATE	Nov 69
NOTE	152p.
EDRS PRICE	EDRS Price MF-$0.75 HC-$7.70
DESCRIPTORS	Advisory Committees, *Curriculum, *Educational Policy, *Institutional Environment, Occupational Information, *Program Improvement, Questionnaires, Vocational Education, Vocational Education Teachers, *Vocational Schools
IDENTIFIERS	*Wisconsin

ABSTRACT

Curriculum initiation in public vocational programs in Wisconsin is an unstructured procedure, is conducted from an inadequate data base and with little or no involvement of local advisory committees. Improved procedures are recommended for the purpose of facilitating curricular relevance to rapidly changing occupational needs. Data collection was by personal interview with 74 vocational school directors and local coordinators and 61 advisory committee chairmen. Also, 102 randomly selected vocational school teachers provided information by a mailed questionnaire. Environmental and policy and/or information variables were studied as significant determinants of curricular program decisions. Environmental variables include enrollment, type of school, city size, male/female student ratio and part-time/full-time ratio. Policy and/or information variables include the rationale and the data base for initiating new curriculums. It is recommended that state education agencies form an alliance with state employment service offices which can serve as Manpower Service Centers. Such centers could provide up-to-date labor market information for a state, area, or city. In the interim, the improved use of local advisory committees is recommended. (CH)

ED041123

CURRICULUM INITIATION IN WISCONSIN VOCATIONAL & TECHNICAL SCHOOLS

by

Thomas A. Barocci

CENTER FOR STUDIES IN VOCATIONAL
AND TECHNICAL EDUCATION

RESEARCH REPORT

Industrial Relations Research Institute
University of Wisconsin

November 1969

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VT011247

ACKNOWLEDGEMENTS

Primary acknowledgements for the funding of this research must go to the Center for Studies in Vocational and Technical Education, the University of Wisconsin, established through funds provided by the Ford Foundation.

The author is indebted to many vocational administrators, instructors, and advisory committee members in Wisconsin for their cooperation in the gathering of data for this study. The data collection assistance of the University of Wisconsin Survey Research Laboratory is greatly appreciated. The author is also indebted to Dr. Richard Whinfield of the Center for his help throughout this project.

The author, above all, is indebted to Professor Gerald G. Somers for his initial suggestion of this study and for his invaluable advisory assistance. Further, the author is grateful for the insightful comments and criticisms provided by Professor W. Lee Hansen. Lastly, the author acknowledges the typing skill of Donna Beutel and the editorial assistance of Susan Hamann and Vicki Triplett.

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INTRODUCTION

In recent years in the United States educators and legislators have become increasingly aware of the important role vocational education has to play in the future of our country. The Wisconsin State Board of Vocational, Technical, and Adult Education points out the myriad demands on vocational education:

> The forces of urbanization, increased mobility, industrialization, scientific and technological advance, population growth, increased consumer demand for services and manufactured products, expansion in the size and skills of the labor force, and job competition in the labor market are creating new demands on vocational, technical and adult education. . . .[1]

Recent productivity developments have led to productivity increases of 3.2 percent per year or better. Employment rose from 58,000,000 in 1947 to 80,000,000 in 1967,[2] and it continues to rise. Further, there has been a long-term educational upgrading of workers in all major occupational groups.[3]

The ramifications of all the technological, educational and occupational changes are great, especially for vocational education programs. It was estimated that 26 million young people would enter the labor force between 1960 and 1970.[4] To assure them fruitful working lives, they must be trained in skills that are demanded now in the labor market and will be needed in the future. A large part of this training must be done by the vocational education schools.

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[1] Wisconsin State Board of Vocational, Technical, and Adult Education, Vocational Technical and Adult Educational Facilities (Madison: 1967), p. xi.

[2] U.S. Department of Labor, Manpower Report of the President, 1967 (Washington: Government Printing Office, 1967), p. 211.

[3] Harvey Hamel, "Educational Attainment of Workers," Monthly Labor Review (February, 1968), p. 26.

In response to the pleas of educators and manpower experts, Congress enacted legislation designed to deal with the broad shifts in the distribution of employment by occupational speciality. The Job Corps, the Elementary and Secondary Education Act, the Higher Education Act, and the Vocational Education Act of 1963 represent the response of the nation to changes in employment opportunities in our society.[5] The most important of these Acts with regard to vocational training is the Vocational Education Act of 1963 (as amended in 1968),[6] which authorized the appropriation of funds for vocational education. "From 1964 to 1966, total expenditures for vocational education increased almost 2½ times. Federal grants to the states rose over four times, and state and local expenditures doubled."[7] (See Table 1.)

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[4] U.S. Department of Labor, Manpower Report of the President, 1963 (Washington: 1963), p. 90.

[5] Leonard A. Lecht, Manpower Needs for National Goals in the 1970's (New York: Frederick A. Praeger, 1969), pp. 28-29.

[6] Vocational Education Act, Public Law 88-210, 88th Congress, H.R. 4955, Dec. 1963.

[7] U.S. Department of Health, Education, and Welfare, Office of Education, The Bridge Between Man and His Work (Madison: The Center for Studies in Vocational and Technical Education, 1968), p. 32.

Table 1: Funding of Vocational Education

Fiscal Year	Total	Federal	State
1964	$332,895,000	$ 55,027,000	$277,758,000
1965	604,646,000	156,936,000	477,710,000
1966	799,895,000	233,794,000	566,101,000

Since 1964 over a billion dollars has been spent (or is being spent) in order to "maintain, extend, and improve existing programs of vocational education" and "to develop new programs of vocational education." In particular, the Vocational Education Act of 1963 sought to insure that vocational education would be tied to the needs of the local labor market.[8]

Vocational Education in this study is defined as:

> Training below the college grade intended to prepare students to earn a living in an occupation in which success is dependent largely upon technical information and an understanding of the laws of science and technology as applied to modern design, production, distribution, and services.[9]

This definition implies that as occupations change, and as scientific and technological information increases and brings about change, vocational-technical education programs must shift accordingly. As this implication is the basis of this study, two questions are paramount:

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[8] Gerald Somers, "The Response of Vocational Education to Labor Market Changes," The Journal of Human Resources (Supplement 1968).

[9] Dictionary of Education (2nd ed.; New York: McGraw-Hill Book Co., 1959).

1. Do vocational-technical programs change, and if so, to what extent?
2. What are the forces and procedures involved in the initiation of change?

Change can be highly specific, dealing, for example, with curriculum content or instructional technique within existing courses and programs, or it can be more extensive, dealing with the initiation or elimination of courses or programs. It is the latter more extensive change that is the focus of this study.

Aims of the Study

Many different opinions have been voiced relating to the attainment of the goal of full employment since the United States was officially committed to it in 1946. The running argument between the "structural" and the "aggregate demand" schools of thought continues in some academic circles. However, there is one area where manpower experts seem to be in unanimous agreement: to attain and maintain full employment requires an expansion and upgrading of the educational system. The complexity of the technology of the economy demands that those entering the labor force be better trained than in any previous period in the history of our country.[10] The implications of the steady decline in the demand for unskilled labor are quite obvious; a person upon entry into the workforce and an occupation, has to be trained in skills that are going to be valuable to him in both a qualitative and a quantitative way. He must be prepared for a job that will still exist in the future so that his employment will not be of a temporary nature. Job obsolescense would throw him back into the world of the unemployed or force extensive and possibly unnecessary retraining. To meet the rapidly changing occupational needs of the United States, the educational system must move at an even more rapid rate so that people will be trained to fill jobs as they become available. To accomplish this goal, schools offering vocational-technical programs must adjust and expand. There are no standardized procedures for such adjustment or expansion, but some procedural methods of curriculum initiation are outlined for specific programs financed by state or federal grants. These methods will be discussed in the body of this study.

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[10] U.S. Department of Labor, Manpower Report of the President, 1966 (Washington: Government Printing Office, 1966), pp. 20-22.

Vocational and technical education is designed to serve all segments of the labor force with appropriate training programs, generally below the professional level. The main problem lies in the identification of labor market needs. Although a number of methods have been attempted, no systematic effort has been made to identify these procedures or to place a qualitative or quantitative measure on their success or failure. In part, this study is designed to clarify and identify the influence of labor market information on the procedures of curriculum initiation employed in the schools in Wisconsin which offer vocational programs.

The specific objectives of this study are threefold:

1. To inventory the procedures presently employed in the initiation of public school vocational and technical programs.

2. To measure the effectiveness of these procedures.
3. To analyze the techniques used and recommend improvements in their utilization and/or changes in their format.

Chapter I presents a summary of the activities of the educators and noneducators involved in curriculum initiation. Chapter II summarizes the methodology used in this study to collect and analyze data relating to curriculum initiation for Wisconsin vocational programs. Chapters III, IV, V, and VI, the major part of this study, describe the interrelationships between the environmental and policy characteristics of each school which are related to curriculum initiation. Chapters VII and VIII examine the influences of vocational advisory committees and instructors on curriculum initiation. The final chapter summarizes the major findings in light of the objectives outlined above and includes policy recommendations relevant to curriculum initiation.

CHAPTER I

VOCATIONAL ADMINISTRATORS AND LABOR MARKET INFORMATION

Vocational Administrators

Vocational educators have long been aware of the need for adapting their programs to changing occupational needs, and they have developed some specific plans for schools to follow in measuring the occupational pulse of their communities or areas. The Wisconsin State Board of Vocational, Technical and Adult Education has published several manuals on coordinating school services with the needs of the community, and, in addition, within its policies of distributing federal aid, it has a provision for paying part of the salary of a person or persons employed especially to maintain contacts with the community.[1] These "coordinators" are expected to perform clearly defined functions and prepare quarterly reports of their activities for submission to the State Board. They report directly to the school director in most schools, or to a chief or head coordinator in the larger schools; the director is, in fact, the head coordinator.

The vocational division of the Wisconsin State Department of Public Instruction has a somewhat different procedure. One person in each school district is charged with the responsibility for coordinating all vocational programs (except in Milwaukee, where there are program coordinators as well as a local vocational coordinator). The "local vocational coordinator" usually reports to the school principal. In the larger school systems, he is responsible to an administrative official who is in charge of vocational education for the entire system. In effect, the vocational school director and the high school local vocational coordinator are the individuals mainly responsible for determining the overall needs that a school must meet.

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[1] The source of the information related to the activities of the directors and coordinators and the organization of the vocational education system in Wisconsin is: Dr. Richard Whinfield, Administrative Associate, Center for Study in Vocational and Technical Education, University of Wisconsin, Madison, Wisconsin.

The relationship between the State Board of Vocational, Technical, and Adult Education and the vocational division of the State Department of Public Instruction is quite informal with respect to curriculum initiation. If the Department of Public Instruction wants to initiate a vocational program in one of the high schools in the state, it can do so without formal approval of the State Board of Vocational, Technical and Adult Education as long as certain requirements relating to program area and content are met by the school. Further, these agencies are linked by an informal liasion committee which meets to discuss problems with the high school and vocational school programs.

In general, the plan of coordination between the schools and the community calls for several kinds of contacts on the part of vocational coordinators, including:

1. Periodic visitations to business, industry, and service organizations which provide a potential employment pool.

2. Establishing and working with advisory committees of a general or ad hoc nature composed of employers and employees from the community.

3. Conducting community surveys to help determine public demand and need.
4. Cooperating with community service and professional organizations and associations, including the Wisconsin State Employment Service (hereafter referred to as the WSES).
5. Coordinating their activities with other high schools and vocational, technical and adult schools.

The purpose of these acitivites is to effect two-way communication for (1) determining the community needs, and (2) interpreting the school program to the community.

While a vocational school director or coordinator is the focal point of the school's community contact, the program administrator evaluates the recommendations he receives, and he must have the approval of the local board of education as well as the state agency before he can initiate a new program, since federal aid is frequently involved. Each state agency has rather stringent review procedures and carefully developed standards for new programs. The latter often require the completion of a community survey and the appointment of an advisory committee.

Vocational advisory committees, theoretically an integral part of the curriculum initiation process, are for the most part, composed of non-educator representatives from the local community.[2] Using their knowledge of labor market demands, they are supposed to give advice regarding new curriculum. The extent of their connection with school administrators and their influence in curriculum initiation will be discussed in Chapter VII. Further, when developing new curriculum, the school administrators should consult with the vocational instructors, since the instructors have the closest contact with the students and their demands for new programs.

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[2] A detailed report of the connections between vocational advisory committees and vocational administrators can be found in American Vocational Association, Vocational Advisory Committees (Washington: Government Printing Office, 1963).

Additional information from a variety of sources is also available to assist local personnel in determining whether a new program should be started or an old program discontinued. An overview of the information available will be given in the next section.

Published Labor Market Information[3]

Published labor market information from a variety of agencies and groups, ranging from the federal government to local unions is available to vocational education administrators.

The Manpower Development Training Act of 1962 emphasizes and encourages the responsiveness of vocational education and training to the needs of the local labor market, and the Secretary of Labor is directed to develop and make available information on "skill requirements, occupational outlook, job opportunities, labor supply, and employment trends" to be used in the "educational, training, counseling, and placement activities" performed under the Act.[4] This responsibility has been fulfilled mainly by the preparation of area skill surveys, most of which are conducted by the public employment service; however, local schools often do their own surveys. Data on the demand for workers are obtained from employers in the designated area by means of a survey. The related training needs surveys are similar to the area skill surveys except that they are much less extensive in research techniques used and number of employers contacted. These surveys, along with other projections provided by the U.S. Department of Labor or other government agency, are readily available to vocational educators for use in program planning. (The use of these and other publications will be discussed in Chapter IV).

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[3] The labor market information discussed in this section was obtained by the author through visits to the Wisconsin State Employment Service headquarters to examine the data it supplied and by examination of federal publications made available through the kind help of Miss Vickie Tripplet, Librarian, John R. Commons Reference Center, Social Science Building, The University of Wisconsin.

What is the real value of these surveys to the vocational educator? In pointing out some of the shortcomings of these and any job vacancy surveys, Somers contends that the procedures used in the surveys are many times inadequate for getting reliable results and that lack of employer records of current job openings and future needs also contribute to survey unreliability.[5] He does not imply that surveys should be discontinued but rather that they should be revised and improved so that accurate projections can be made.

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[4] Manpower Development and Training Act of 1962. Public Law 87-415 as amended.

[5] G.G. Somers, "The Response of Vocational Education to Labor Market Changes," Journal of Human Resources (Supplement 1968), pp. 45-46.

Necessary for the achievement of this goal would be researchers' adherence to the procedures outlined in the Bureau of Employment Security guidebook, and enlightenment of employers on the value of keeping records of job vacancies and trying to project the future needs of their companies.

The most important of the large number of publications put out, for the most part, by the Wisconsin State Employment Service (WSES). are the Wisconsin Manpower Outlook publications, the Wisconsin Manpower Report, and the Wisconsin Occupational Needs Census.

The Wisconsin Manpower Outlook (WMO) publications are in two forms. The first is series of one-page projections for approximately 50 occupations ranging from accountants to x-ray technicians. The most recent series covered the period of 1961-66 and was titled "Individual Occupational Reports"; these reports described and provided location information, training and qualifications, and employment outlook for each job classification. Most of the jobs covered in this publication relate to occupations requiring a college degree and consequently are not very relevant to the work of vocational school coordinators except for those working with a degree-granting technical school above the high school level.

The second of the WMO publications is a set of three booklets that give five-year projections in three defferent types of occupational groups: (1) Clerical, Sales, Service and Skilled Occupations; (2) Managerial, Professional and Technical Occupations; and (3) Teaching

Professions. The first two are directly related to the educational training offered by the vocational schools in the state and are based on a statewide survey of 3,700 employers who estimated their manpower needs for the next five years. From this survey, a summary was put together by the WSES and distributed to all the schools in the state. As with the federal surveys, the main shortcoming is the unreliability of the data supplied by the employers, which is evident when the actual increases or decreases in certain occupations are compared with the previously projected changes.

The WMO Managerial, Professional, and Technical booklet covered the 1961-66 period. When the actual employment in these occupations is compared with what was projected, the mean percentage of variance was 42.4 percent;[6] on the average, the projections were off by over a third of the actual employment in the various occupations covered in the survey. In most cases, the estimate was too low. In the WMO Clerical, Sales, Service and Skilled Occupations booklet the mean percentage of variance was 50.9 percent;[7] again, most of the estimates were too low. Thus the educators using the projections would do no harm by leading people into the occupations that were recommended, but these publications certainly did not give a true or representative picture of employment trends.

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[6] Wisconsin State Employment Service Research Department. 1967, mimeo.

[7] _Ibid_.

These publications have been cancelled by the WSES, and hopefully they will be replaced by a more sophisticated analyses. Something will probably be attempted since the Vocational Education Act of 1963 states that the public employment offices are responsible for providing relevant labor market data for vocational planning: "A state can receive its allotment of federal funds only if it submits to the Commissioner of Education a plan ensuring that the vocational education system will give due consideration to 'current and projected manpower needs and job opportunities.'"[8] The allotment of federal funds is quite substantial and certainly will not be forfeited.

The second important series of publications is the occupational needs surveys conducted on a county basis. These studies are usually titled "Manpower Resources of ABC County" or "Occupational Needs Census of ABC County" and are usually compiled with the joint cooperation of the WSES county office, the area vocational-technical school, and local employers. They report such information as the job openings available and the characteristics of the labor force unemployed and seeking work. Since the local vocational school personnel usually help in this kind of study, they should be aware of the short-run needs of the community. These reports focus on what is rather than what will be and as a consequence, the research techniques need not be as complicated as those used in making projections. These studies are also classified or referred to as area skill surveys and will be so designated in the remainder of this study.

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[8] Somers, "The Response of Vocational Education to Labor Market Changes," Journal of Human Resources (Supplement 1968), p. 45.

The Third major publication that comes from the WSES is a series titled "Wisconsin Manpower Report," which is published bi-monthly. It is prepared on a city and surrounding area basis with the cooperation of local employers. Included in these reports is an analysis of the supply and demand for labor and a discussion of trends in employment in a specific area. The local office of the WSES makes these reports available to the local schools for use in planning and guidance activities.

Worth noting is the WSES's most recent attempt at supplying accurate and useful labor market information--a new series of publications called "The Data, People, Things." Taking the various occupational needs surveys done in areas of the state and combining them according to the new job classifications of the third edition of the Dictionary of Occupational Titles (D.O.T.), the WSES classifies job openings and projected job openings into seven work areas: Data; Data-People; Data-Things; Data-People-Things; People-Things; People; and Things.[9] Within each classification of data, people, and things are nine levels of complexity, descending in order from 0-8. All levels except 8 show a significant relationship to data, people or things.

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[9] These classifications are found in the fourth (Data), fifth (People), and sixth (Things) digits of the occupational codes.

In the "Data, People, Things" publications, each job opening is classified in the following ways:

1. The work area--the job opening's significant relationship to Data, People or Things, or a combination of them.
2. The worker function--the level of complexity within the work area.
3. The date of job opening, the educational and training requirements, the experience required and the promotional possibilities of the job opening.

This most recent WSES publication is most impressive in appearance and purpose, but again the research methods used are questionable since it is based on employer contacts and projections which have in the past been proven to be unreliable and inadequate for projection purposes. Although these publications are too recent for any concrete evaluation to be made of their worth or use by vocational educators, the least that can be said is that they are a step in the right direction toward the goal of sophisticated and usable manpower information.

The state has also been active in the U.S. Department of Labor's "Smaller Communities Program" which is designed to supply extended services to smaller communities which do not have a permanent employment service office and are not contiguous to a large labor market area. Publications usually referred to as "Manpower Resources of ABC County" are put out and made available to educators in the respective communities. These reports include things such as occupational needs of the local employers, job vacancies, and an analysis of the labor force of the area or community. These publications too, are too new topass judgement on, but there seems to be an obvious ommission: none of the publications the author has seen have any mention of the possibilities of and procedures for mobility of the unemployed out of the loose labor markets areas. It is imperative that this kind of information be made available to the labor force in small communities where the job opportunities are scarce. The task of supplying this information could be taken on by either the state employment service or the educational institutions in the area.

Of the many other federal and state government publications on the prospects for employment in different occupations, the most important is the U.S. Department of Labor's Occupational Outlook Handbook, which has been published every two years since 1949; the Occupational Outlook Quarterly keeps readers informed of the latest developments between the main editions. The Handbook provides counselors and others with information about employment outlooks, earnings, training requirement, and related topics for over 700 occupations, and it also assesses the impact of future economic, social, and educational trends on the employment outlook in industries and occupations. The wealth of information in this book could be quite valuable to the planner in vocational education; the only major drawback is that the information is not specific enough to be translated directly to local needs. Nevertheless the book is probably the best source of manpower projections available at the present time, although the research methods used have also been questioned by scholars in the field.

Professional and trade union journals are another source of information on the occupational needs of an area which can be utilized by the planners in the field of vocational education. In the study these sources will be classified as "other publications."

After reviewing almost all of the publications available to vocational educators, the author has developed many doubts as to the value of existing labor market data. The research methods used fall short of potential of the government agencies to do good research. But it must be assumed in this study that these publications are worthwhile (better than nothing?) and that a person who uses them will be better equipped to initiate new courses and programs than a person who is ignorant of the facts contained in the publications. By "better equipped to initiate new curriculum" is meant that the user has a better grasp of the trends and future needs of the labor market. This knowledge is imperative if the educators are going to initiate curricula which are going to be valuable to both the individual and the labor market as a whole.

In summary, the author concurs with Somers' conclusions on the value of the labor market data available. He says, "...at the present time, these data, especially with regard to projections for changing manpower requirements, are inadequate in quality and quantity for the specific purposes of the vocational planner."[10]

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[10] Somers, "The Response of Vocational Education to Labor Market Changes," Journal of Human Resources (Supplement 1968), p. 51.

Research Relating to the Study

At present, there are several projects in progress that deal in some way with curriculum establishment in vocational schools. The most important is Project VISION (Vocational Information System Involving Occupational Needs) which has been completed by the Wisconsin State Employment Service under contract with the Bureau of Employment Security, through funds provided by the Office of Manpower Policy, Evaluation and Research. This project is awaiting final printing at the Government Printing Office in Washington, and no preliminary reports were issued.[11]

The over-all aim of this project is the development of a model system of local occupational and employment information involving current and prospective manpower resources and requirements. More than just occupational projection data would be provided; both labor market and occupational analysis expertise in disseminating occupational employment information would be utilized. It seems, from the bits and pieces of information that the author has gathered, that the study will contribute a good deal in the form of a model to be used by vocational educators in their predictions of labor market needs.

Since 1962 there has been increasing interest in research related to curriculum development.[12] Phipps and Evans point out the inadequacy of most of the research done in this area. Nevertheless, some of the projects and reports have influenced the shaping of vocational curricula. Recent literature on curriculum development has emphasized the importance of regional as well as national social and economic developments to curriculum initiation.[13] However, Beam emphasizes the importance of local manpower requirements in vocational planning.[14]

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[11] For a report of the purposes of Project VISION, see Thomas Ritter, "Project VISION: An Approach to a Model System of Occupational Employment Information," 1967 Proceedings of the Indiana Manpower Research Conference (Bloomington: Indiana University, mimeo), pp. 101-116.

[12] For a review of the research done since 1962 on curriculum development see Lloyd J. Phipps and Rupert N. Evans, "Curriculum Development," Review of Educational Research, 38 (October 1968), pp. 367-381.

In general, most of the studies of curriculum initiation have been tangential in that they focus on specific areas of curriculum. Only Dufty's study looked at the over-all processes of curriculum initiation; thus, it is the only one relevant for comparison to this study.[15]

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[13] Ibid., p. 367.

[14] Homer E. Beam, "An Analysis of Socio-economic Trends As an Aid to Program Planning in Vocational Agriculture in North Carolina," (Ph. D. diss., University of North Carolina, 1961).

[15] Norman Dufty, "Program Initiation in Technical Institutes," Journal of Human Resources, 3(summer 1968), pp. 346-362.

CHAPTER II

METHODOLOGY

It was hypothesized that authoritative information about the use of various techniques in the establishment of new curriculum could be obtained from three sources: (1) in the vocational, technical and adult schools, the local director; and in the comprehensive high schools, the local vocational coordinator; (2) vocational advisory committee members, and (3) vocational education teachers.

The major source of information was, as anticipated, the first group. Each vocational, technical and adult school director and each high school vocational coordinator was identified for the Center for Studies in Vocational and Technical Education by two stage agencies, and was interviewed by a professional interviewer from the University of Wisconsin Survey Research Laboratory. (See Appendix A for the School Directors and Coordinators questionnaire.)

In the process of the interview, a list of advisory committee members for each school was obtained from the directors and coordinators. A substantial difference was found among the schools in the establishment and organization of advisory committees. Many vocational, technical and adult schools appoint advisory committees for each full-time program and for each apprenticeship program. The high schools tended to have one advisory committee for all vocational programs.

An advisory committee is chaired either by a member of the committee or by a school staff member. Where chairmen were identified, they were selected for interview since they were assumed to be the most knowledgeable. Only one chairman was selected from each school unless there were five or more advisory committees, in which case one chairman for each five committees was selected--the presumption being that with increasing numbers of advisory committees in a school, the less likely one chairman could adequately represent the school's use of advisory committees.

Where a school staff member served as chairman, or where no chairman was identified, a single member of one advisory committee was randomly selected; if there were more than five committees, two committees were randomly selected and one member of each committee was randomly selected. Each available advisory committee chairman or substitute, as outlined above, was interviewed by an interviewer from the University of Wisconsin Survey Research Laboratory. (See Appendix B for the Advisory Committee questionnaire.) The advisory committee members were, for the most part, non-educators. Some schools indicated that there was no permanent advisory committee; consequently they were omitted from this facet of the study.

The third group was a randomly selected sample of instructors who teach in the areas of vocational and technical education in the State of Wisconsin. The list of these teachers was supplied by a stage agency, and the random selection was made by the Center.

The instructors were mailed a questionnaire by the University of Wisconsin Survey Research Laboratory. (See Appendix C for the Instructor questinnnaire.)

The questionnaires were, in part, designed to determine the roles for the three different groups in the initiation of new programs or courses in the curricula of the high schools and vocational education schools in the State of Wisconsin, but for the most part they were set up so that the procedures used in the initiation of new courses and/or programs in the schools could be identified.

Responses to the Interviews and Questionnaires

A total of 74 people are classified as vocational school directors and local vocational coordinators in the state of Wisconsin. Interviews were completed with all of them. Thus, the information obtained in the interviews comprises a census of the population of "directors and coordinators" in the state.

For the advisory committee chairmen, 69 were selected for interview and 61 interviews were completed, an 88 percent response rate. There were 144 instructors selected to receive the mailed questionnaire, and a total of 102 usable questionnaires were returned, for a 71 percent response rate.

Upon examination of the interview responses it became evident that the directors and coordinators were by far the most important influence in the establishment of new curricula in the vocational and technical programs in the state. Consequently the bulk of this report will be concerned with an analysis of the information obtained from the directors and coordinators. An overview of the information obtained from the advisory committee chairmen and the instructors will be presented in Chapters VII & VIII.

Variables Isolated for Purposes of Analysis

For purposes of analysis, the responses from the interview and the environmental information obtained from a pre-interview questionnaire sent to the directors and coordinators were categorized and classified into groups of demographic and policy characteristics of the participating schools. The variables have been classified as follows:

A. Environmental Variables
  1. Enrollment (three categories)
    a. under 500.
    b. 500-1,000.
    c. over 1,000.
    (These numbers refer to the total enrollment of the school including both full-time and part-time.)
  2. Type of School (two categories)
    a. High school
    b. Vocational, technical and adult education school.
    (In this study the types of schools were differentiated using the following criteria: if a school was autonomous in the sense that the curriculum was in the area of vocational and technical education and if it was not directly related to the local high school, it was classified as a vocational school. The rest of the schools were comprehensive high schools with departments relating to vocational and technical education and are classified as high schools.)
  3. City Size (three categories)
    a. under 10,000 population
    b. 10,000 to 40,000 population
    c. over 40,000 population
    (These cities were classified by the census figures from the 1960 population census. This refers to the size of the city in which the particular schools are located.)

4. **Male-Female ratio** (two categories)
   a. The number of males greater than the number of females.
   b. The number of females greater than the number of males.

   (The directors and coordinators were asked to indicate the number of males and of females enrolled in the vocational and technical programs, and from this information these figures were derived.)

5. **Part-time--full-time ratio** (two categories)
   a. The number of part-time students greater than the number of full-time students.
   b. The number of full-time students greater than the number of part-time students.

   (The ratios were obtained from information given in the pre-interview form.)

(Note: The interviews were done in the first four months of 1967 and the environmental characteristics may have changed since that time, but for purposes of this study it will be assumed that they all have changed to the same degree and still reflect a representative view of the environmental characteristics of the schools studied.)

B. **Policy and Information Variables**:

POLICY: 1. **The origin of new courses** (how the administrators became aware of the need for new curriculum.)

2. **Source of advice for the establishment of new curricula** (the stated sources of advice for the initiation of each new course or program, either from individuals or publications). "Curricula" when used in this study refers to both courses and programs.

INFORMATION: 3. **Use of state or federal labor market surveys.** (The directors and coordinators were asked to indicate if any kind of labor market survey was used to establish the need for any new courses or programs that were initiated. Also included were local surveys.)

4. **Use of certain data publications** before establishing new curricula. (The directors and coordinators were shown a list of data publications available to educators and asked to indicate if any of the sources listed were in fact used before establishing new courses,

the list follows as it appeared in the interviews.)

a. Labor market statistics

b. Occupational Outlook Handbook

c. Area skill surveys

d. Other sources of information or data.

5. Use of three or more data publications before establishing new courses or programs. (referring to the above listed data publications.)

6. Use of Wisconsin Manpower Outlook labor market studies (the directors and coordinators were shown a list of WMO publications and asked to indicate if they used them.) The list appeared as follows:

a. WMO - Managerial, Professional and Semi-Professional Occupations, 1961-1966.

b. WMO - Teachers, 1961-1966.

c. WMO - Clerical, Sales, Service and Skilled Occupations 1962-1967.

d. "A Study of Health and Related Service Occupations in Wisconsin, 1963-1965."

e. The last six studies on the list shown were related to specific counties in the state and are included as one listing in the final analysis. The counties studied were: Milwaukee, Racine, Brown, Polk, Marathon & Calumet; and Manitowoc.

7. Use of two or more Wisconsin Manpower Outlook studies.

C. Dependent Variables or Program Decision Variables: (These variables were hypothesized as dependent in some way on the policy and/or information variables and on the environmental variables.)

1. The similarity of the new curricula to the old curricula. (This was designed to determine whether or not the educators were branching into new and different fields or extending the already present areas of study; they were asked to indicate if the new courses initiated were similar in content to the already existing curriculum.)

2. Anticipation of placement problems. (The directors and coordinators were asked if they anticipated any placement problems for the graduates of the school's programs. This variable could also be considered as totally a function of the environment of the school, e.g., if it was located in an area of a tight

or loose labor market.[1] This will be taken into account in the analysis of the data.)

3. Most effective procedure for establishing new curricula. (The directors and coordinators were asked to indicate what they believed to be the most effective procedure that should be used to start a new curriculum.)

4. Reasons for starting new curricula. (The directors and coordinators were asked to indicate the reason for starting each of the new courses or programs they listed.

5. Discontinued curricula (from a list of any courses or programs that were discontinued after January 1, 1964.)

D. Other Miscellaneous Isolated Variables:

1. Methodology used in the labor market study which was used before establishing new programs or courses.

2. New programs or courses started after January 1, 1964.

3. Recommended new programs or courses after January 1, 1964.

4. Membership of advisory committees.

5. Role of the advisory committees as stated by the directors and coordinators.

6. Minimum number of times per year that the advisory committee meets.

7. Role of instructors in the establishment of new courses or programs as stated by the directors and coordinators.

8. Reason for discontinuing courses.

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[1] For purposes of this study, a tight labor market is defined as a situation where the unemployment rate is low and the existing demand for labor exceeds the supply. When the existing supply of labor exceeds the employers' demand a loose labor market exists.

Hypotheses

The specific area of concentration of this study is relatively new. Curriculum initiation procedures have only been touched upon in previous studies of vocational education. The work done by Samuel Burt and Norman Dufty in this area are the only sources of empirical information available from which to develop hypotheses about the outcome.[2] The conclusions of Burt and Dufty along with intuitive assumptions relating to vocational education personnel and policies will be used to make predictions about the results of this study.

Extrapolating from Dufty's study of a technical institute in a medium sized city in the Middle West, the author hypothesizes that the initiation of new programs will be stimulated for the most part by pressures outside of the bureaucratic system of the local and state levels of vocational education administration. Dufty found that the suggestions of local employers and the student demand factors were the most important pressures that led to the initiation of new curricula. Burt further buttresses this hypothesis by pointing out the increasing awareness of industry of the value of vocational training institutions in serving their needs at little or no cost. Because of these observations, it seems reasonable to expect that the bulk of the curricula initiated by the vocational schools will come as a response to the demands of local industry and the student demands for new areas of study.

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[2] Samuel Burt, Industry and Vocational-Technical Education (New York: McGraw-Hill Book Co., 1967), and Norman Dufty, "Program Initiation in Technical Institutes," Journal of Human Resources, 3(Summer 1968), pp. 346-362.

Further, the author predicts that the staff members of the vocational schools will make only limited use of the available labor market surveys that are designed to aid in program development in the schools. This prediction results from intuitive notions and knowledge that vocational education administrators are understaffed and overburdened and do not have the time and/or initiative to keep up with the published information that is sent to them by various state and federal agencies.

Dufty found that the State Board of Vocational Education was a minor influence in the initiation of new programs. He observed that the administrators did keep in contact with the State Board but only to receive their tacit support for new programs, probably because the State Board held the purse strings under provisions of the Vocational Education Act of 1963 and the Manpower Development and Training Act of 1962. This same relationship with the State Board is likely to hold true in this study.

Preliminary observations of the returns indicate that the advisory committes of the various schools are, for the most part, functionless. They seem to be set up by the schools only to fulfill the requirements and guidelines set up by the state and federal laws which require them to be present in order for the schools to receive funds for support of new programs. It will probably be found that the advisory committees are not an integral part of program initiation.[3]

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[3] Samuel Burt supports this hypothesis in "Initiating New Vocational and Technical Education Programs," Research Approaches to the Initiation of New Vocational-Technical Programs, (Madison, Wis.: The Center for Study in Vocational and Technical Education, University of Wisconsin, 1966).

Finally, the procedures used to establish new curricula in the vocational schools are, for the most part, highly unstructured processes that will vary with the environmental characteristics of the school and the policies of the administrators and the school district.

Model for the Analysis

For the purposes of analysis, a model is set forth so that the data that have been collected can be examined in a systematic manner.

Since the federal laws specifying requirements for obtaining funds are the same for all schools and because the study was limited to schools in the State of Wisconsin, these two factors will be taken as being the same for all of the schools and the model will not take into account the influences of these two "overseers" as being responsible for differences among the schools in the initiation of new curricula.

Because of the myriad interrelationships that could possibly be present in this study, the model will be very general so that all conceivable relationships can be taken into account as the analysis develops.

The model is as follows:

$$PD = f(EOP \& I) \quad \text{or} \quad PD = f[EO (EO)]$$

where PD is the program decision variable or the dependent variables, E is the environmental characteristics of the specific school, P & I is the policy and informational variables characteristic of the specific schools and school administrators, and O is the other factors isolated that may have influence on the program decision variables.

This model postulates that the program decision variables are a function of the environmental characteristics surrounding a school, the policy or informational variables characteristic of each school, and other institutional factors as outlined in the previous section. The second part of this two-equation system postulates that the P & I variables may in turn be a function of the environmental and other variables of a specific school.

Statistical Methods Employed in the Analysis

In an effort to collect all of the information that might possibly influence the procedures involved in the establishment of new curricula, a wide spectrum of information was gathered from the questionnaires. All questionnaires were coded, keypunched and verified, and the data were categorized according to the variable classifications outlined in the previous section.

As almost all of the data was in nominal form, the use of statistics to test the relationships between variables is limited. Cross tabulations of the variables will be tested for independence using the Pearson chi-square test.[4] When the chi-square test cannot be

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[4] The statistical methods employed in this study are taken from Hubert Blalock, Social Statistics (New York: McGraw-Hill Book Co., Inc., 1960). and William L. Hays, Statistics (New York: Holt, Rinehart, and Winston, 1963).

used because of small cells in the matrix, ranking will be used to facilitate comparisons. Rankings will be meaningful to compare distributions because the data obtained from the directors and coordinators are of census proportion.

CHAPTER III

ENVIRONMENTAL INFLUENCE ON PROGRAM DECISION VARIABLES

The program decision variables were predicted to be dependent in some way on the school environment.[1] This chapter will examine the relationship between the environmental characteristics of each school and the program decision variables. The environmental characteristics were obtained from the pre-interview form filled out by each of the directors and coordinators.[2] (The influence on the number and type of new courses and programs established are examined in Chapter VI.)

Similarity of New to Old Curricula

The directors and coordinators were asked to indicate if the newly established curricula were similar to the existing vocational-technical programs in the school. The initiators of this study believed that knowing whether the new curricula were similar to the old would give an indication of the extent to which educators were branching out into new areas rather than revising the traditional areas of vocational education. It seemed reasonable to expect that the larger schools would start a smaller number of similar courses and programs than the small schools. The basis of this hypothesis is as follows: The possibilities for setting up curricula in new areas are much better for the large schools because of their greater resources for expansion with regard to availability of instructors and finances.

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[1] The program decision variables--similarity of new curricula to old, anticipation of placement problems, procedures used to determine the need for new curricula, reason for starting each new course or program, and discontinued curricula--are discussed in detail in Chapter II.

[2] The environmental variables--enrollment, type of school, male-female ratio, part-time enrollment, and city size--are explained in detail in Chapter II.

Enrollment and City Size

Enrollment appears to have an effect on the similarity of new curricula to old, but the opposite of what was expected. Schools with the smallest enrollment (under 500 students) had proportionately fewer similar programs than the medium and large schools. Thirty-nine percent of the new curricula were similar to the existing courses and programs in the small schools in contrast to 73 percent of the new curricula in the large schools. On the average 60 percent were similar.[3]

Examination of schools' city sizes in relation to the degree of curriculum similarity revealed that the schools in the larger cities (which, for the most part, were the large schools) established a disproportionate number of new courses and programs which were in the same areas as the existing curricula. Eighty-two percent of the new curricula initiated in the large city schools was similar to the existing curricula. This contradiction of the expectation may be the result of the rate of growth of the schools. If enrollment of the large city schools is increasing faster than that of the small city schools, the large schools may need to set up additional courses and programs in the traditional areas of study to meet the training needs and wants of the students.

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[3] Chi-square with 2 Df - 3,708 (p [probability] <.25). This relationship (enrollment by similarity) is not statistically significant; nevertheless, significance is not always synonomous with importance.

Further, tests of the relationship of part-time enrollment, male-female ratio, and type of school and the similarity of new curricula to old did not reveal any discernable relationship between the variables.

It must be concluded that the degree of curriculum similarity is the result of some institutional factors which cannot be explained by the independent variables utilized in this study. The observed similarity may well be a function of the school administrator's knowledge of labor market needs and/or their unwillingness to branch out into new areas of study.

Anticipation of Placement Problems

The directors and coordinators were asked whether they anticipated any problems in the placement of the graduates of their established programs. A simple "yes" or "no" answer was given in response. It was expected that the personnel in schools in tight labor market areas would voice less concern with the problems of placing their graduates. This hypothesis was based on the intuitive notion that until a problem is at hand, no concern is shown and no solution is proposed. It is assumed in this hypothesis that the larger schools in the larger cities would have tighter labor markets than the small schools in the smaller cities.[4] The responses to this question were cross tabulated with the environmental characteristics of each school and tested for independence. The relationship between the variables was highly significant in all but one of the categories; male-female ratio (see Table 2).

Table 2: Chi-square Values and Significance Level of Key Environmental Factors Classified by Anticipation of Placement Problems.

	Chi-square	Significance Level
Enrollment	6.80	.010
Type of school	13.29	.001
Male-female ratio	.076	.500
Part-time enrollment	3.88	.050
City size	4.62	.050

As anticipated, the small school administrators had a much greater concern with the problems of placing the graduates. Similarly, the school administrators from the small cities were, for the most part, the ones who were concerned with placement problems (see Table 3).

Table 3 shows that 90 percent of the administrators concerned with placement problems were from small schools and 70 percent were from small cities. The data show a correlation between city size and enrollment in the schools. This relationship is likely to be

[4] This assumption is based on an examination of WSES selected employment and unemployment rates tabulated for select cities in Wisconsin.

Table 3: Enrollment and City Size of Schools Classified by Anticipation of Placement Problems

		Anticipation of Placement Problems			
		Yes	%	No	%
Enrollment:	under 500	9	90	9	16
	500-1,000	0	0	16	29
	over 1,000	1	10	31	55
Total		10	100	56	100
City size:	under 10,000	7	70	19	34
	10-40,000	2	20	21	38
	over 40,000	1	10	16	28
Total		10	100	56	100

a function of the condition of the labor market in the school's area, i.e., the condition of the economy as a whole and the amount of industry located in or near the community.

The relationship between type of school and the anitcipation of placement problems was highly significant ($p < .001$). The data show that all of the directors and coordinators expecting placement problems were in a high school. The observation is explained by the following reasons: (1) The areas with relatively lose labor markets (out of the big cities) do not, for the most part, have autonomous vocational education schools. (2) The possibilities of direct job placement are greater for vocational-technical graduates than for high school graduates with vocational comprehensive emphasis. The study by Kaufman and his colleagues showed that vocational-technical graduates, on the average, were placed on a job four weeks sooner than the vocational comprehensive graduates.[5]

Further, the relationship of part-time enrollment and the anticipation of placement problems was significant ($p < .05$). Sixty percent of the administrators who expected placement problems were in schools with no part-time students. In contrast, 91 percent of the administrators who voiced no concern over placing graduates were in schools with part-time students. This relationship was expected. The schools with no part-time students were mostly high schools and located in small cities away from the tight labor markets. Thus, their anticipation of placement problems is warranted.

These observations allude to a very relevant implication concerning the schools located in loose labor market areas. In light of the fact that a placement problem exists, there should be some definite policy of communication between the schools located in the tight labor markets and the schools with placement problems. If this were to be the case, then the programs of the schools in the loose markets could be geared to the needs in areas where jobs are readily available. Further, the small school administrators should realize these possibilities and readily give advice to graduates on the possibilities and implications of moving to areas where job opportunities are available. Certainly, at present, advice on mobility is available, but many of the administrators from the small cities indicated that they never advised a student to move in order to find a job. The reasons they gave for this response centered on the desire of the people in the small communities to keep the young people near home and not increase the already rising rate of out-migration.

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[5] Jacob Kaufman et al., Cost Effectiveness Study of Vocational Education, U.S.O.E. - 512, U.S. Office of Education, October 1968.

Procedures Used to Determine the Need for New Curriculum

The directors and coordinators were asked to indicate what they consider to be the most effective procedure for determining whether there was a need for new programs. The responses were divided into seven categories as follows: (1) establish community need by a local survey, (2) survey potential students, (3) contact or set up advisory committees, (4) ask advice of WSES, (5) request from employer or faculty member, (6) public relations, and (7) miscellaneous. The relationship between the need determination procedures and the type of school is highly significant ($p < .01$). The directors and coordinators from the high schools answered quite differently from the vocational school administrators. These differences are illustrated in Table 4.

Local surveys category was the most often mentioned for both high schools and vocational schools, with 50 percent of each group so responding. The other procedures received quite different emphasis. High schools relied much more heavily on surveys of potential students and advice of the WSES. Seventy-one percent of those using student surveys were in the high schools; of those using the WSES,

Table 4: Need Determination Procedures Classified by Type of School

	High School	Voc. Ed.	Total
Local survey	27 (50) /50/	27 (47) /50/	54 /100/
Student survey	10 (19) /71/	4 (07) /29/	14 /100/
Advisory committee	2 (04) /15/	11 (19) /85/	13 /100/
Employer or faculty request	0 (00) /00/	5 (09) /100/	5 /100/
WSES advice	9 (17) /75/	3 (05) /25/	12 /100/
Public relations	3 (06) /43/	4 (07) /57/	7 /100/
Miscellaneous	3 (06) /50/	3 (05) /50/	6 /100/
Totals:	54 (100)	57 (100)	111

Chi-square with 6 Df = 17.17 ($p < .010$).

Note: Percent of column total in parenthesis and percent of row total in brackets.

75 percent were in high schools, versis 29 percent and 25 percent, respectively, for the vocational school administrators.

In contrast, the vocational education administrators relied on the local employers and the advisory committees to determine the need for new curriculum to a disproportionate degree. Eighty-five percent of those reporting advisory committees as the best procedure of need determination were from vocational schools; all of those indicating employer requests were from vocational schools. Both of these need-indicators are similar. The advisory committees are made up, for the most part, of people from local industry and consequently present, indirectly, the needs of the local employers. These findings show that vocational schools tend to be more concerned about and have better contact with the local labor market. On the other hand, the high school administrators tend to remain within the educational and public service cadres when trying to determine the need for a new curriculum.

The relationship of city size and need-determination procedures is significant at less than the .05 level. A far greater percentage of the administrators from the small cities (population under 10,000) than from the large and medium cities indicated student surveys and WSES contact as the best methods to find out the need for a new curriculum. A disproportionate number of the administrators from the large and medium sized cities voiced the opinion that local employers and advisory committees would be the best sources of information on curriculum needs. Local surveys were the most often mentioned procedures to be used to find out the need for a new curriculum; the administrators from all city sizes voiced this response proportionately the same.

Again, the answers given by the small city directors and coordinators seem to correspond with those given by the high school administrators. Similarly, the responses of the administrators from the medium and to some extent the large cities correspond to the answers of the vocational school directors.

Reasons for Establishing Each New Program

The directors and coordinators were asked to indicate what they believed to be the primary reason for the initiation of each new program started after January 1, 1964. It seemed reasonable to expect that the environment of a school might influence the reasons for starting new programs. The smaller schools would probably rely more on the needs of the local labor market and public demand, whereas the larger schools (most in the larger cities) would rely more on the administrator's knowledge of the labor market since contact with the public and industry is more difficult to maintain in large cities.

The reasons given by the directors and coordinators were divided into four categories to facilitate statistical analysis: (1) meet local or national labor market needs, (2) suggested by local employers, (3) meet public demand, and (4) miscellaneous. These reasons are similar, yet different in several important ways. Those who indicated "to meet state or national or local labor market demands" seem to show that they have a good grasp of the over-all needs of the labor market. This knowledge can be obtained through use of a combination of sources of labor market information such as publications and employer contacts. Alternatively, this response may just be a generalization indicating that the administrators really did not know why the new curriculum was initiated. The second reason, "employer suggestions," seems to connote a limited span of advisory contact. The third reason, "public demand," shows that the school is responsive to the requests of the local populace.

The relationship of types of schools and the reasons given for starting a new curriculum was highly significant at less than the .001 level (see Table 5).

Table 5: Reason for Starting Each New Program Classified by Type of School

	High School	Voc. Ed.	Total
Meet local or nat'l labor market needs	64 (70) /53/	57 (46) /47/	121 (56) /100/
Suggested by local employer	7 (08) /18/	31 (25) /82/	38 (18) /100/
Public demand	18 (20) /43/	24 (20) /57/	42 (20) /100/
Miscellaneous	2 (02) /15/	11 (09) /85/	13 (06) /100/
TOTAL:	91 (100)	123 (100)	214 (100)

Chi-square with 3 Df = 18.29 ($p < .001$).

Note: Percent of column total in parentheses and percent of row totals in brackets.

As shown in Table 5, a disproportionate number of the high school administrators indicated that the new programs were set up as a response to local or national labor market needs. The implications of this is not clear. Are the high school administrators really very knowledgeable of the over-all needs of the labor market, or did they give this response as a generalization to avoid saying "I really don't know"? The latter explanation is probably more valid since the high school administrators tend to use labor market publications less than do the vocational school administrators. (This will be discussed in detail in Chapter V.) A good deal of the knowledge of the over-all needs of the labor market can be obtained only through use of the data publications.

Eighty-two percent of those who indicated local employer suggestions as the reason for starting a new curriculum were vocational school administrators. This observation tends to confirm the assertion that the vocational schools have a much closer contact with and are much more responsive to the requests of the local employers. Further, a disproportionate number of the responses that fell into the miscellaneous category came from vocational school administrators. This seems to show that these administrators have a wider variety of advisors and labor market connections than do the high school administrators. Both types of schools responded to public demand the same proportion of the time.

The relationship of male-female ration and reasons for starting new programs was highly significant ($p < .001$). A disproportionate number of the schools with more males than females set up programs to meet the needs of the labor market. In contrast, the schools with a female majority responded more to the requests of the local employers and public demand. Most of the schools with a female majority were vocational schools which accounts for the fact that they were more responsive to the requests of local employers (see the preceeding section). The schools with a male majority are probably more concerned with placement and consequently more aware of the national and local labor market needs.

Similarly, the relationship of part-time enrollment and the reason for establishing new curricula was highly significant ($p < .001$). Schools with some part-time students responded to public demand to a much greater extent than the schools with no part-time enrollment. This finding is reasonable since a school must respond to public demand in order to attract part-time students. Further, schools with part-time enrollment relied on local employers' advice more so than schools with no part-time students. Eighty-nine percent of those that gave "local employer suggestions" as the reason for a new program had part-time students. This probably is because the schools that are responsive to the demands of local employers may attract part-time students who see the opportunity to get training which their employer wants them to have while at the same time continuing to work. A disproportionate number of those schools with no part-time enrollment indicated that programs were established to meet the needs of the labor market.

Finally, administrators from the large and the small cities seemed to be more responsive to labor market needs in establishing programs, whereas the administrators in medium sized cities responded more to the requests of local employers. This observation may be the result of two factors. First, small communities have a limited number of employers to contact about their needs. Second,, the large cities have so many employers that the schools are unable to respond to all of the requests and, thus, tend to rely more on surveys and published data.

Discontinued Curricula

The initiators of this study believed that the number of courses and programs discontinued would give an indication of the administrator's relative willingness to change and the adaptability of the school's curricula to new labor market demands. The responses to this question were not substantial enough to analyze statistically, but several observations warrant mention. Schools reporting a substantial number of discontinued courses and programs had: (1) large enrollments with (2) some part-time students, and (3) were autonomous vocational schools. These results were expected simply by looking at the three environmental characteristics related to a greater amount of discontinued curricula. Large schools have the personnel and facilities which allow them to adjust more readily than the small schools. Further, schools with some part-time students were shown previously to respond more to public demand, which changes frequently. Finally, as was also shown previously, the vocational schools are better acquainted with the local needs and tend to change curricula more often than the high schools.

CHAPTER IV

SOURCES OF ADVICE AND INFORMATION AND THE INITIATION OF NEW CURRICULA

The many different sources of advice and information used by vocational education directors and coordinators prior to curricula initiation were categorized and labeled "policy and informational" variables (see Chapter II). This chapter will examine the relations between the sources of information and advice and the different factors classified as "program decision" variables.

Use of Data Publications

The directors and coordinators were asked to indicate on a list of types of data publications available, the kinds that they used or referred to on a regular basis; they gave simple "used" or "not used" answers. The directors and coordinators were also shown a list of labor market studies for the State of Wisconsin, prepared by the Wisconsin State Employment Service. For this list they were asked to indicate if they were (1) aware of each, (2) received each, (3) read each, and (4) used each. The use or non-use of the above was categorized for analysis and labeled "informational" variables.

As shown in Table 6, almost all of the directors and coordinators indicated that they used area skill surveys. This result was expected because the area skill surveys are sent directly to the directors and coordinators by the agencies doing the surveys. On the average, 68 percent of the administrators indicated use of the data

Table 6: Summary of the Administrators' Use of Data Publications

Publication	Used	Not Used	Total
Labor market statistics	49 (71)	20 (29)	69 (100)
Occupational Outlook Handbook	44 (64)	25 (36)	69 (100)
Area skill survey	62 (90)	7 (10)	69 (100)
Other publications	31 (45)	38 (55)	69 (100)

Note: The numbers in parentheses are the percentage of row total.

publications. Surprisingly, almost 30 percent of the directors and coordinators stated that they did not use any type of labor market statistics (row 1 in the table). Further over one-third of the administrators did not refer to the Occupational Outlook Handbook, (row 2 in the table).

Table 7 shows a summary of the use of Wisconsin Manpower Outlook Studies (WMO).

Table 7: Summary of the Use by Administrators of the Wisconsin "Key" Labor Market Studies

	Aware		Received		Read		Used		% Aware
	Yes	No	Yes	No	Yes	No	Yes	No	
WMO Managerial, prof. and semi-prof. occupt. 1961-66	62	11	53	8	46	6	36	12	(58)
	(83)*		(71)		(62)		(49)		
WMO teachers 1961-66	36	32	27	7	25	2	7	18	(19)
	(50)		(36)		(34)		(09)		
WMO clerical, sales, service & skilled occupt. 1961-66	54	18	49	4	47	2	33	15	(61)
	(73)		(66)		(64)		(45)		
WMO study of health & related service occupt. 1961-66	40	31	31	10	26	6	16	9	(40)
	(54)		(42)		(35)		(22)		

*Numbers in the parentheses are the percentage of the total number of directors and coordinators (74) that respectively were (1) aware, (2) received, (3) read, (4) used.

Note: The "don't know" answers were dropped and consequently the totals are not always consistent.

As seen in Table 7, the directors and coordinators used the WMO studies to a lesser degree than they did the general data publications. Interesting is the fact that a large percentage of the directors and coordinators were not even aware of these publications. Further, on the average, only 46 percent of administrators who were aware of the labor market studies actually referred to them in the curricula initiation processes.

Policy Factors

For new curricula established after January 1, 1964, the directors and coordinators were asked to answer the following questions: (1) How, in general, did the need for new curricula originate? (2) Specifically, on whose advice was each of the new programs or courses started? The responses to these questions were categorized and labeled "policy" variables.

A summary of the general origin of the need for new curricula is shown in Table 8.

Table 8: Summary of General Origin of Need for New Curricula

	Number	Percent
1. Survey community need	38	32
2. Public funds	17	14
3. Suggestion of local industry	14	12
4. Popular demand	13	11
5. Advisory Committee	12	10
6. State Board (SBVTAE)	6	5
7. Suggestions of WSES	4	3
8. Other	14	13
TOTAL	118	100

As seen in the table, the majority of the directors and coordinators (rows 1, 3, 4, and 5) regarded local needs as the origin for their new curricula. Only a small percentage saw the State Board of Vocational, Technical and Adult Education or the WSES as the basis for the origin of new curricula.

The responses of the directors and coordinators in reference to the source of advice for each of the new courses and programs initiated are summarized in Table 9.

Table 9: Summary of Sources of Advice

Source of Advice	Number	Percent
Director or coordinator	50	24
Industry	44	21
Advisory committees	36	17
WSES	25	12
Administrators' staff	13	6
Dept. of Education	11	5
Published information	8	4
Other	19	11
TOTAL	206	100

An interesting observation from the table is that the directors and coordinators indicated themselves as the source of advice for almost one-fourth of the new curricula. Notable in the table (row 7) is the fact that only 4 percent of the new curricula was established using published information as the source of advice.

The following sections of this chapter will show the relationships existing between the policy and informational factors (outlined in the previous sections) and the program decision variables. These are as follows: (1) reasons for starting new curricula, (2) most effective procedure for curricula initiation, (3) similarity of new curricula to old, (4) discontinuation of curricula, and (5) anticipation of placement problems.

Reasons for Starting New Curricula

Since the labor market publications are mainly concerned with manpower needs, it was expected that their use would be related to the reasons for starting new curricula. In particular, it was hypothesized that those directors and coordinators who indicated "manpower needs" as the reason for starting new curricula would tend to use labor market information to a great extent. The rationale behind this prediction is that the only readily available source of information on manpower needs (other than the separate category of "local industry needs") are the publications put out by the state and federal governments.

Table 10 summarizes the administrators' reasons for starting new curricula.

Table 10: Reasons for Starting New Curricula

Reasons	Responses	
Manpower needs	115	(53)*
Suggestion of local employer	26	(12)
Public demand	46	(21)
Other	32	(14)
TOTAL	219	(100)

*Percentage of column total is in parentheses.

As shown in Table 10, the majority (53 percent) of the new curricula was established in order to meet manpower needs. Analysis of the data shows that there was no apparent connection between the use of labor market publications and the reasons for curricula initiation.

At best it can be concluded that a majority (53 percent manpower needs plus 12 percent employer requests) of the new curricula is initiated in response to manpower needs.

Most Effective Procedure for Curriculum Initiation

The directors and coordinators were asked to indicate what they felt to be the most effective procedure that could be used in the initiation of new courses and programs. It was hypothesized that the procedures listed as the most effective would be related to the publications used by the administrators. Past experience, if any, should give insight into the value of the data publications, some of which outline procedures to be used in curriculum initiation. The author believed that those who indicated "community need" as the most effective source to be used in the initiation of curriculum changes would tend to use more labor market statistics, primarily area skill surveys.

Although 73 percent of the directors and coordinators (48 of 67) indicated "community need" as the most effective procedure, this procedure was not found to be related to the use of labor market publications. It appears that the use of labor market publications did not influence the administrators' opinions of the most effective procedures to be used in curriculum initiation, possibly indicating that the directors and coordinators base their opinions of the most effective procedure for curriculum initiation on their past experiences.

Similarity of New Curricula to Old

The labor market is constantly demanding new people trained in new skills. In order to supply the manpower needed to fill the positions that become available, and if training is to be valuable to the students in the future, the vocational and technical schools must continually adapt their curricula. Thus, through the whole of this report the establishment of new courses and programs is considered a priori to be a "good" thing. The function of training for future needs is one of the primary reasons for having vocational and technical programs. This assertion can be taken one step further: new curricula established not similar to existing curricula are better than new courses and programs that are similar to existing ones. By definition, the "old" courses and programs are not geared to provide the training needed for the new skills and professions that come to the fore of labor market needs. This is assumed because people trained to fill the demand in completely new occupational areas will be relatively more valuable to employers and the labor market than will those who are trained in old skills; even if an old skill is updated, it will become outdated in a shorter period of time than will a new skill. Further, it is easier for an employer to upgrade and update a skill currently being used in the operation of the plant than it is to train a person in a totally new skill. Consequently, the task of training in new skills falls upon the vocational education system as part of its duty to serve the best interests of the people and the labor markets.

General Origin of Need for Curricula

From an examination of the similarity of new curricula to old in relation to "general origin of need," several notable observations emerged. The directors and coordinators who stated that "need" was determined by suggestion of the State Board and/or advisory committees set up a disproportionate number of dissimilar courses and programs. On the other hand, the administrators who indicated "popular demand," "community surveys," and local industry suggestion as the primary origins of "need" set up a disproportionate number of similar curricula. This observation is probably a function of the nature of the party that the school administrators rely on for advice on manpower needs. The local populace and industry tend to want curricula related to the present demand whereas the State Board is better equipped to predict the future needs of the labor market. Similarly the advisory committees would be relatively more concerned with future needs than would the local industry. These findings lead to a policy recommendation: Directors and coordinators who are concerned with meeting both the present and future needs of the labor market should seek labor market information from a number and variety of their contacts. The ease of contact with an advisory source should not be considered when administrators are looking for new routes for vocational education curricula.

Comparison of the source of advice for each program or course to similarity of new curricula to old revealed no significant relationship, with one exception. When the staff of the directors and coordinators was listed as the source of advice for new curricula, 92 percent of the new curricula were similar to the existing curricula. This finding indicates that the school staff are trying to improve and expand the existing curricula. Either they are not aware of the future needs of the labor market or, by the nature of their assigned duties, are not concerned with expansion into new curriculum areas.

Labor Market Information

The use of labor market publications was expected to have a positive influence on the propensity to set up dissimilar curricula because most of the publications are concerned with the future needs of the labor market and contain projections of the new skills needed in the future. If, in fact, the publications were used, the result would be a greater knowledge of the future needs of the labor market and consequently a tendency to try and fill these needs by setting up curricula to train people in the new areas. Table 11 shows the percentage of similar and dissimilar curricula classified by the various sources of labor market information used by the directors and coordinators.

It is evident from Table 11 that the use or nonuse of labor market publications had little effect on the degree of similarity of new curricula to old. This finding tends to confirm the conclusions

Table 11: Similarity of New and Old Curricula Classified by Sources of Labor Market Information

Publications		New Curricula Similar to Old (%)	New Curricula Not Similar to Old (%)
Local, state or national labor market survey	Used:	51	36
	Not used:	09	04
Labor market statistics	Used:	45	28
	Not used:	14	13
Occupational Outlook Handbook	Used:	39	27
	Not used:	21	13
Area skill surveys	Used:	57	36
	Not used:	3	4
Other publications	Used:	24	22
	Not used:	36	18
Three or more data publications	Used:	24	10
	Not used:	36	30
WMO Managerial, Prof. and Semi-Prof. Occup.	Used:	45	32
	Not used:	16	7
WMO Teachers: 1961-66	Used:	21	8
	Not used:	50	21
WMO Sales, Clerical & Service Occupations	Used:	45	27
	Not used:	18	10
WMO Health & Related Service Occupations	Used:	39	30
	Not used:	26	5
Use of two or more WMO studies	Used:	31	26
	Not used:	28	15

of the analysis and discussion of the available labor market data (Chapter I). That is, using labor market information is better then not using it, but its use certainly does not have a profound influence in the curriculum initiation processes.

Summary

The degree of similarity of new curricula to old was not greatly affected by the use of informational publications or the "advice" variables of the individual schools. Exceptions include the use of the advice of the State Board of Vocational Education and advisory committees in originating curricula; advice from both sources resulted in the propensity to set up dissimilar curricula. The implications of this lack of influence of the policy and informational variables is difficult to discern. The directors and coordinators may be cognizant of the future needs of the labor market as a result of their use of data publications and sources of advice, but do not have the facilities or initiative to set up new areas of study. On the other hand, the sources of advice and the publications used may not give the directors and coordinators the advice and information that they need to start proceedings toward initiation of new curricula. Both of these interpretations are valid to some extent.

Discontinuation of Curricula

Data Publications

The directors and coordinators were asked to indicate the programs and courses that were dropped after January 1, 1964. The responses were categorized into the same areas of study as were the newly initiated curricula.

Most of the labor market publications give an indication of both declining and expanding occupations. To test the usefulness of this information, the number of dropped courses and programs were compared with the use and nonuse of the data publications.

Analysis revealed that there was no relation between the dropped curricula and use of data publication. This observation shows that, if in fact the data publications are used, they are looked to primarily for indications of new labor market needs and not as a source of advice on the obsolescence of existing curricula.

Origin of Need and Sources of Advice

The relationships of curricula discontinuation and policies on "origin of need" and "source of advice" were not significant. Still, two findings are worth noting. The administrators who indicated the school staff as the source of advice for new curricula tended to discontinue a disproportionate number of programs and courses. On the other hand, when public funds or local industry were noted as the "origin of need" for new curricula, there appeared to be a tendency to discontinue a lesser number of courses and programs.

These findings lead to the conclusion that proceedings to discontinue curricula come, for the most part, from within the schools. The opinions of the school administrators and student demand are probably the most important influences in curricula discontinuation.

Anticipation of Placement Problems

The anticipation of placement problems can have a profound influence on decisions relating to curriculum initiation or discontinuation. If, for example, the administrators realize that graduates are having trouble finding jobs, they may be motivated to add programs in areas which are in greater demand in the labor market. On the other hand, if no placement problems are at hand, there may be no incentive for the directors and coordinators to initiate changes.

This section will examine the policy and informational influences on the anticipation of placement problems.[1]

Origin of Need and Sources of Advice

Table 12 shows anticipation of placement problems classified by the origin of need for new curricula.

Table 12: Anticipation of Placement Problems Classified by Origin of Need for New Curricula.

Origin of New Curricula	Anticipation of Placement Problems	
	Yes	No
Survey community need	6 (40)*	32 (31)
Advisory committee, public demand or local industry	1 (07)	37 (36)
Other	8 (53)	33 (32)
TOTAL	15 (100)	102 (100)

Chi-square = 5.44 with 2Df ($p < .10$).
*Percentage of column total is in parentheses.

As seen in the table, 40 percent of the directors and coordinators who anticipated placement problems indicated that they used a survey of the community to find out the need for new curricula. A survey of the community job market is the most effective method of determining if placement problems exist; consequently, this relationship was expected. Comparison of the anticipation of placement problems with the sources of advice for each new course or program revealed similar results (see Table 13).

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[1] All of the directors and coordinators who anticipated placement problems were from high schools. See Chapter III.

Table 13: Anticipation of Placement Problems Classified by Source of Advice Used for Each New Course or Program

Source of Advice	Anticipation of Placement Problems	
	Yes	No
Industry	3 (11)*	41 (24)
Directors and coordinators	11 (39)	38 (23)
Director and coordinator staff or labor market information	7 (25)	30 (17)
Advisory committee	2 (07)	34 (20)
Other	5 (18)	31 (18)
TOTAL	28 (100)	174 (100)

Chi-square = 7.57 with 4 Df ($p < .10$).

*Percentage of column total is in parentheses.

Table 13 shows that the directors and coordinators who listed themselves, their staffs, or labor market information as the source of advice tended to anticipate placement problems to a disproportionate degree. This is similar to the finding for "origin" because the surveys of the community needs are most often done by the directors, coordinators, and/or their staffs. The consequent anticipation of placement problems may well result in their advising the initiation of new curricula in an effort to alleviate the problems.

Labor Market Information

Although statistical analysis of the data shows a significant relationship between the anticipation of placement problems and use of informational publications, it is difficult to infer a causal relationship. It is not clear whether the directors and coordinators saw no placement problems because they used labor market publications, or whether they used informational data because they foresaw placement problems. The first interpretation seems more plausible for the following reason. The directors and coordinators of vocational schools use, on the average, more labor market information than do the high school administrators.

All of the administrators who anticipated placement problems were from the high schools. Consequently, it seems reasonable to say that the lack of concern with placement problems on the part of vocational school administrators may be related to their use of labor market information.

On the other hand, anticipation of placement problems may be a direct function of the school's environment. The small schools away from the big city labor market are much more likely to have placement problems unless mobility is encouraged and carried through.

CHAPTER V

SOURCES OF ADVICE AND THE SCHOOL ENVIRONMENT

It is commonly believed that environmental factors can have a profound influence on individuals or groups. On the basis of this assumption, it was expected that the environmental characteristics of a school would be related to the policies of the school administrators. Further, it was expected that the type of labor market information used by the directors and coordinators would be related to the environmental characteristics of the school. The environmental characteristics used in this analysis are: enrollment, type of school, male-female ratin, part-time enrollment, and city size.[1]

This chapter will present the results of testing the relationship between the school environment and the policy variables of the directors and coordinators. These policy variables are: "general origin" of need for new curricula, and the source of advice for each new course or program initiated.[2] Further, the relation between environment and use or nonuse of specific data publications will be examined.

Origin of Need for New Curricula

Enrollment

In Table 14, where the schools are classified by enrollment, the category distribution is approximately one-fourth, one-fourth, and one-half, respectively. These enrollment categories will be referred to as small, medium, and large schools.

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[1] For a discussion of the environmental variables, see Chapter II.

[2] For a list and discussion of the policy and informational variables, see Chapter II.

Table 14: Schools Classified by Enrollment

Enrollment	Number	Percent
Under 500 students	20	(27)
500-1,000 students	18	(24)
Over 1,000 students	36	(49)
Total	74	(100)

It was expected that the size of a school would be an influence on the general procedure used by that school to determine the need for new curricula. To test this prediction, the responses of the administrators indicating the general origin of need for new curricula were cross-tabulated with the enrollment categories and tested for dependence. As seen in Table 15, the relationship between origin of need and enrollment is not highly significant. Nevertheless, several observations can be made. Approximately one-third of the schools in each enrollment category relied on community surveys to determine if there was need for new curricula. Notable differences are present in the other origin-of-need categories. The small schools relied disproportionately on public funds and the WSES to indicate the need for new curricula. On the other hand, the large and medium sized schools tended to use local industry suggestions and public demand as the indicators of need for new programs and courses more than did the small schools.[3] These findings are interesting, particularly in view of the fact that the Vocational Education Act of 196

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[3] The seeming reliance of the large schools on public demand to find out need for new curricula is the result of merging categories. The large schools are mostly in the large cities where, because of the innumerable requests, it is next to impossible to pinpoint curriculum needs.

Table 15: General Origin of Need for New Curricula by Enrollment

Origin of Need	Enrollment			
	Under 500	500-1000	Over 1000	Total
Survey community need	9 (24) /31/	11 (29) /33/	18 (47) /30/	38 (100) /32/
Suggestion of local industry or public demand	2 (7) / 7/	8 (30) /24/	17 (63) /29/	27 (100) /22/
Suggestion of WSES or public funds	12 (43) /41/	6 (21) /18/	10 (36) /17/	27 (100) /23/
Suggestion of Advisory Comm., out of present programs, or other	6 (21) /21/	8 (29) /25/	14 (50) /24/	28 (100) /23/
TOTALS:	29 (24) /100/	33 (27) /100/	59 (49) /100/	121

Chi-square with 6 Df = 10.05 ($p < .10$)

Note: Some categories of "Origin of Need" were merged for purposes of analysis.

Note: Line 3, "Public Funds" refers to the responses of the administrators who indicated that, in general, they found out the need for new curricula because public monies (local, state or federal) were made available for use for expansion of the existing curriculum.

Note: Percent of row total is in parenthesis, and percent of column total is in brackets.

places great emphasis on school contact with the State Employment Service; in fact, contact must be maintained as a qualification for receiving federal funds. Consequently, it might be expected that the large schools, which receive a great percentage of the available funds, would be in close contact with the WSES. As seen in Table 15, this is not the case. An explanation may be that the small schools are not able to determine whether or not new curricula are needed and therefore look for outside help. The large schools, on the other hand, are probably better equipped in terms of staff and funds to do community surveys to determine need for new curricula; they then use the WSES simply as a "rubber stamp" for approval of their curricula decisions.

Type of School

At the time of the survey, there were 40 autonomous vocational education schools in Wisconsin as well as 34 comprehensive high schools with vocational education departments. In the high schools, the vocational education program is only one area of the over-all curriculum. In the autonomous vocational schools there is complete concentration on vocational and technical education. Because of this and other differences, it was expected that the school policies would differ with regard to determining the need for new curricula. The relationship between type of school and origin of need for new curricula was highly significant.

As shown in Table 16, the vocational schools make more use of their advisory committees for need determination than do the high schools. This result was expected because the advisory committees in vocational schools are traditionally more numerous, better organized, and more functional than the high schools' advisory committees. (See Chapter VII for a detailed discussion of the advisory committee's role in the schools.)

Table 16: Origin of Need for New Curricula Classified by School Type

Origin of Need	High School	Voc. School	Total
Survey community need	16 (42) /29/	22 (58) /35/	38 (100) /31/
Local industry suggestion	2 (14) / 4/	12 (86) /18/	14 (100) /12/
Public demand or public funds	23 (74) /41/	8 (26) /12/	31 (100) /26/
State Board suggestion	2 (33) / 4/	4 (67) / 6/	6 (100) / 5/
WSES suggestion	2 (50) / 4/	2 (50) / 3/	4 (100) / 3/
Advisory committee suggestion	3 (23) / 5/	10 (77) /15/	13 (100) /11/
Out of existing programs or other	8 (53) /13/	7 (47) /11/	13 (100) /12/
TOTALS:	56 (46) /100/	65 (54) /100/	N = 121

Chi-square with 6 Df = 25.7 ($p < .001$)

Note: Some of the categories for need determination were merged for analysis. Percent of row total is in parentheses and the percent of column total is in brackets.

Further, a disproportionate number of the vocational schools rely on the local industry to determine the need for new curricula. The studies of Burt and Dufty point out the ever increasing connection between the vocational-technical schools and the local industries.[1] When a local employer has a manpower shortage in a certain skill, he is more likely to request program initiation in the local vocational-technical school than in the high school. It is commonly accepted that the vocational schools are better equipped to train for specific occupational skills.

On the other hand, the high schools relied more on public demand or available funds (line 3, Table 16) as the origin of need for new curricula. The reason behind the high schools' responses to public demand may well be related to the fact that most of the high schools are located in the small communities where it is relatively easier to keep in contact with the requests of the community than it is in the larger cities.

The reliance of the high schools on public funds as the origin of need for new curricula is difficult to interpret. The coordinators who gave this response seemed to use the rationale that, if funds are available for expansion, there must be a need for new curricula.

Male-Female Ratio

Fifty-six percent of the schools had more males than females enrolled in the vocational education programs. In general, males outnumbered females in the high school programs and females were in the majority in the vocational schools.

Although there appeared to be no significant relationship between male-female ratio and the origin of need for new programs, two observations are notable. Of those who indicated the State Board and the WSES as the origin of need for new curricula, 83 percent and 100 percent, respectively, had a greater number of males than females. This implies that the advice coming from these two state agencies centers on the needs in male rather than female occupations. This deduction is based on the assertion that the schools are in fact concerned, first and foremost, with the interests of their students and consequently are using the "advisors" that best serve their interests. With the ever increasing labor force participation rate of women, it seems as if a reappraisal of emphasis at the state agency level would be appropriate.

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[1] Samual Burt, Industry and Vocational-Technical Education (New York: McGraw-Hill, 1967); Norman Dufty, "Program Initiation in Technical Institutes," Journal of Human Resources, 3 (Summer 1968), pp. 346-362.

Part-Time Enrollment

Most part-time courses in vocational education are offered in the evening so that working people can attend without suffering job loss and/or inconvenience. Part-time curricula are usually geared to hobbies, handicraft, refresher courses, and topics relating to skills needed in the local labor market. Because of this emphasis, it was predicted that the schools with part-time enrollment would rely on public demand and local industry requests as the indicators of need for new curricula. Table 17 shows the cross tabulation used to test this prediction.

As seen in the table, there is a significant relationship between part-time enrollment and the origin of need for new programs. As expected, the schools with part-time students indicated to a disproportionate degree that they relied on public demand and local industry to determine the need for new curricula. Further, a large majority of the schools that used the availability of public funds as the factor

Table 17: Origin of Need for New Curricula

Classified by Part-time Enrollment

Origin of Need	No Part-Time	Some Part-Time	Total
Survey community needs	12 (31) /5/	26 (69) /15/	38 (100) /31/
Local industry suggestion	2 (14) /5/	12 (86) /15/	14 (100) /12/
Public demand	3 (23) /8/	10 (77) /12/	14 (100) /11/
WSES or State Board suggestion	3 (30) /8/	7 (70) /12/	13 (100) /11/
Public funds	12 (67) /30/	6 (33) /7/	18 (100) /15/
Advisory comm., existing program, or other	8 (29) /19/	20 (71) /25/	28 (100) /23/
Totals:	40 (33) /100/	81 (67) /100/	121

Chi-square with 5 Df = 12.728 ($p < .05$)

Note: Some of the categories were merged for purposes of analysis. Percent of row total is in parentheses, and percent of column total is in brackets.

determining the need for new curricula had no part-time students. This finding follows from the previous section (school type by origin of need) which showed that the high schools, which rarely had part-time students, indicated to a disproportionate degree that public funds determined the need for new curricula.

Part-time programs and courses are designed to serve the needs of the community. Thus, the administrators, when able to set up part-time curricula, should respond to the local demand (both private and industrial).

City Size

The relationship between city size and the origin of need for new curricula was not significant. Nevertheless several observations are worth noting. Administrators in small cities (population under 10,000) indicated public funds as the origin of need to a disproportionate degree. In medium and large cities, they tended to rely on advisory committees much more than did the administrators from the small cities.

Summary

In sum, the schools that are large, vocational and with some part-time students relied to a great extent on the local industry to indicate the need for new curricula. On the other hand, the schools that are small and located in the small cities relied on public funds and the WSES to determine if there was need for a new course or program. Further, the schools with a male majority enrollment seemed to be in closer contact with the WSES.

Source of Advice for New Curricula

After listing all of the courses and programs started after January 1, 1964, the directors and coordinators were asked to indicate "on whose advice" each new course or program was initiated. This section is similar to the previous section, yet different. It will examine the relationship between the advisors for a specific curriculum and the environmental characteristics of each school, whereas the discussion in the previous section focused on the origin of information in the need for new curricula in relation to the school environment.

It was expected that the environment of a school would be related to the sources of advice used in curricula initiation. Out of a total of 317 programs initiated in the given period, the directors and coordinators were able to indicate "on whose advice" 216 (68 percent) were initiated. The following analysis is based on these responses and their relation to the environmental characteristics of the school.

Enrollment

The sources of advice for each new program are classified in Table 18 by school enrollment. As seen in the table, there is a highly significant relation between enrollment and the source of advice. The small schools tended to rely mostly on the advice of the school administrators, school staffs and the WSES. In contrast, the medium sized schools tended to rely on the advice of the local industries and their advisory committees, while making little use of the school personnel and the WSES. The advisory sources of the large schools are varied. These findings lead to several conclusions.

The small schools tend to use the readily available sources of advice (administrators and school staff), perhaps because of a lack either of other available sources of advice or of the initiative and

Table 18: Sources of Advice for New Programs

Classified by Enrollment

Source of Advice	Under 500	500-1000	Enrollment over 1000	Total
Local industry	4 (8) /8/	19 (38) /35/	27 (54) /25/	50 (100) /23/
Coordinator or director	22 (43) /42/	7 (13) /13/	22 (43) /20/	51 (100) /23/
School staff	7 (53) /13/	0 (0) /0/	6 (47) /6/	13 (100) /6/
WSES suggestion	8 (32) /15/	3 (12) /6/	14 (54) /12/	25 (100) /12/
Advisory committee suggestion	2 (6) /4/	18 (50) /33/	16 (44) /15/	36 (100) /17/
Local Department of Education	3 (27) /5/	0 (0) /0/	8 (73) /7/	11 (100) /5/
Other	7 (23) /13/	7 (23) /13	16 (54) /15/	30 (100) /14/
Totals:	53 (25) /100/	54 (25) /100/	109 (50) /100/	216 (100)

Chi-square with 12 Df = 48.17 ($p < .001$).

Note: percent of row total is in parentheses and the percent of column total is in brackets.

personnel needed to investigate all advisory possibilities. The disproportionate use of local industry as the source of advice by medium sized schools may be because they are located mostly in the medium sized cities (10,000-40,000 population); in the small cities there is usually not much industry to look to for advice, and in the large cities there are too many industries to be able to take their advice into account. However, the medium sized cities have just enough industry to make their advice both practical and useful.

Also notable is the fact that only 12 percent of the new programs were initiated on the advice of the WSES; only three programs were initiated because of advice from the State Board.[2] This finding shows that the state agencies concerned with vocational education are really not an integral part of curricula initiation, at least not on the advisory level.

Type of School

Vocational schools and comprehensive high schools were expected to differ in their policies as a logical result of the difference in the nature of their functions and administrations.

The expected difference between the types of schools and the sources of advice used is substantiated by the highly significant results of the statistical analysis (see Table 19). Local industry, advisory committees and the Department of Education were the sources of advice for 62 percent of the new curricula initiated by the vocational schools.[3]

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[2] The responses indicating the State Board as the source of advice are included in the "other" category (line 7, table 18).

[3] The survey results gave no indication as to why the vocational schools used the Department of Education as an advisor.

Table 19: Sources of Advice for New Programs
Classified by Type of School

Source of Advice	High School	Voc. School	Total
Local industry	12 (14) /13/	38 (76) /31/	50 (100) /23/
Director or coordinator	29 (56) /32/	22 (44) /18/	51 (100) /24/
Schools' staff	10 (77) /11/	3 (23) /2/	13 (100) /6/
WSES suggestion	20 (80) /22/	5 (20) /4/	25 (100) /12/
Suggestion of advisory committee(s)	8 (22) /9/	28 (78) /23/	36 (100) /17/
Local Dept. of Education	0 (0) /0/	11 (100) /9/	11 (100) /5/
Other	13 (43) /13/	17 (57) /13/	30 (100) /13/
Totals:	92 (43) /100/	124 (57) /100/	216

Chi-square with 6 Df = 47.07 ($p < .001$)

Note: Percent of row total is in parentheses and the percent of column total is in brackets.

The high schools used these sources for only 21 percent of their new curricula. On the other hand, the director or coordinator, school staffs, and the WSES served as the advisory source for 64 percent of the high schools' new curricula. The vocational schools used these same sources for only 23 percent of their new courses and programs.

These findings correspond with earlier conclusions regarding origin of need in relation to the type of school. This correlation seems to indicate that the directors and coordinators tend to use the same sources to find out if there is need for new curricula and for advice on the specific curricula to be initiated.

In summary, the vocational schools seem to have a wider variety of advisors than the high schools and tend to use advisory committees and local industry as their main sources; the high schools tend to stay within the educational cadre when seeking advice.

Male-Female Ratio

Comparison of the schools' male-female ratios with the sources of advice for initiating new curricula revealed a highly significant relationship ($p < .025$). Those schools with a male majority tended to use the WSES as a source of advice to a disproportionate degree (see Table 20). This finding supports the implication of the previous section that the WSES emphasized male occupations in their advice for new curricula.

An interesting result with regard to industrial demand for trained personnel emerges here. The schools with more females than males tended to use industry advice more than those with a male majority. The direction of the relationship in this case is not clear. Either the directors and coordinators use industry advice to a greater degree because they anticipate greater problems in placing females or the industries offer more advice because their labor shortages are in the

Table 20: Source of Advice for New Programs
Classified by Male-Female Ratios

Source of Advice	Male > Female	Female > Male	Total
Local industry	23 (46) /19/	27 (54) /28/	50 (100) /23/
Director or coordinator	27 (53) /23/	24 (47) /25/	51 (100) /24/
School staff	4 (31) /3/	9 (69) /9/	13 (100) /6/
WSES suggestion	19 (76) /16/	6 (24) /6/	25 (100) /12/
Advisory committee suggestion	24 (67) /20/	12 (33) /13/	36 (100) /17/
Local Dept. of Education	3 (27) /3/	8 (73) /8/	11 (100) /5/
Other	20 (67) /16/	10 (33) /11/	30 (100) /13/
Totals:	120 (56) /100/	96 (44) /100/	216

Chi-square with 6 Df = 16.31 ($p < .025$).

Note: Percent of row total is in parentheses, and the percent of column total is in brackets.

areas that are traditionally filled by females. Further, schools with more females than males are, for the most part, vocational schools which tend to use industry advice to a greater extent than the high schools. Similarly, the greater contact with the WSES of the schools with a male majority may also be a function of the type of school. As shown previously, most of the schools with a male majority are high schools which tend to make more use of the WSES as a source of advice than do the vocational schools. It may be that all of the relations between male-female ratios and the source of advice for new curricula are a function of the type of school involved.

The schools with some part-time students used industry as the source of advice more than did the schools with no part-time enrollment. Of the 50 programs started because of the advice of local industry, 38 (76 percent) were in schools with some part-time students. The implication seems to be that the vocational schools in Wisconsin are using their facilities to serve the demands of industries to upgrade the skills of their employees. The question of whether or not the task of retraining is a function which should properly be expected of the Wisconsin vocational education programs is outside the realm of this study.

The relationship between city size and the source of advice for new programs is highly significant (chi-square with 12 Df = 45.77, $p < .001$). Schools in large and medium sized cities used advisory committees and local industry as the source of advice much more than the schools in the small cities. The schools in the small cities tended to use the school administration and the WSES to a disproportionate degree.

In sum, the schools in the small cities (population under 10,000) tend to stay within the educational framework when looking for advice. Schools in the large and medium sized cities have a wider variety of "advisors," many of which are outside the educational cadre.

Summary

This section has pointed out the relationships between the environmental characteristics of the schools and the sources of advice used in curricula initiation. The analysis revealed a noteworthy pattern. The schools that used industry and/or advisory committees as their main sources of advice had the following characteristics: large enrollment, some part-time students, located in large cities, female majority, and autonomous vocational schools. Schools that relied on the school administration and the WSES as their main sources of advice were, in general: small, only full-time students, located in small cities, male majority, and high schools.

These findings and those of the previous section analyzing the relationships between environment and the origin of the need for new curricula are so similar that it can be concluded that the school administrators use the same sources to determine the need for curricula expansion and as advisors for specific course or program initiation.

Also notable is that published information was used as the source of advice for only 3 percent of the new curricula.

Data Publications

It was expected that schools with certain environmental characteristics would tend to rely on similar data publications.[4] Historical contact with stage agencies, communications between schools, or administrative experience could create a pattern among schools with certain environmental characteristics which would be related to the use of certain data publications. To test this possibility, the use or nonuse of each of the available data publications was cross-tabulated with each category of the environmental characteristics and tested for dependence. Of the 55 tests done, only four resulted in a significant relationship. No general pattern emerged even among the significant tests.

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[4] Use of specific data publications is summarized in Tables 6 and 7 in Chapter IV.

Analysis in Chapter IV showed a significant relationship between the school environment and the aggregate use of data publications. However, after examining the relationship between the use of certain publications and the school environment, it must be concluded that these two variables are completely independent. The schools, no matter what their environment, made the same proportionate use of specific data publications.

CHAPTER VI

FACTORS RELATED TO CURRICULA ESTABLISHED OR RECOMMENDED AFTER JANUARY 1, 1964

Between January 1, 1964 and the time of the interviews (1st quarter of 1967), 317 new programs were started in the vocational schools and vocational education departments of the comprehensive high schools. This chapter examines the factors that influenced the number and types of programs initiated or recommended in the given period of time.

As seen in the Table 21, the areas of industrial maintenance and repair, business, data processing, and service comprise about 85 percent of the programs initiated in this period. In the following analysis the emphasis will be given to the factors influencing the differences in the number and kind of programs, particularly in the four main areas of expansion.

Table 21: Programs Started After January 1, 1964

Programs	Number	Percent
Industrial maintenance and repair	136	43
Business	112	35
Data processing	13	04
Service	13	04
Other	43	14
Total	317	100

School Environment and New Curricula

Enrollment

Seventy-four schools in Wisconsin offer vocational-technical curricula. For purposes of analysis, these schools are divided into three enrollment categories: under 500, 500-1,000, and over 1,000. Table 22 shows enrollment in relation to the number of schools and their respective number of new programs.

Table 22: School Enrollment Classified by Number of Schools and New Programs

	Under 500	500-1,000	Over 1,000	Total
Number of schools	20	18	36	74
Percent of total number of schools	27	24	49	100
Number of new programs	60	87	170	317
Percent of total number of new programs	19	27	54	100
Expected number of new programs (row 2 x 317)	86	76	155	317

Row 5 in Table 22, "expected number of new programs," is based on the assumption that all schools have proportionately equal demand, facilities, and initiative to set up new programs, e.g., if the small schools make up 27 percent of the total number of schools, they should set up 27 percent of the new programs.

If the above assumption is true, the large and medium sized schools started more programs than expected, and the small schools started less--only 19 percent of the new programs, short of the expected 27 percent. These observations seem to indicate a positive relationship between school size and the propensity to initiate new programs. This relationship seems reasonable since the large schools probably have more demand for new programs as well as more funds and facilities to use in initiating programs.

Looking at the type of programs set up in the different schools, the data show that the small schools did not initiate any programs in data processing, one of the areas highly recommended for expansion by the WSES. This is undoubtedly because of the high cost of the equipment needed and the scarcity of insturctors in this relatively new field of study. The large schools are more likely to be able to afford equipment and draw instructors to teach data processing. In addition, the small schools are located mostly in the small cities where the demand for trained personnel in data processing will probably be small. All of the schools expanded curricula in the other areas in approximately the same proportion.

Type of School

A comparison of the vocational schools and the comprehensive high schools with regard to the new programs established showed that they both started proportionately the same number. As seen in Table 23, the high schools comprise 46 percent of the schools offering vocational-technical programs and started 45 percent of the new programs. Similarly, the vocational schools comprise 54 percent of all the schools and started 55 percent of the new programs.

Table 23: New Programs Classified by School Types

Type of School	Number of Schools	Percent of Total Number	Number of New Programs	Percent of Total No. of New Programs
High school	34	46	142	45
Vocational school	40	54	175	55
Totals:	74	100	317	100

Although the types of schools set up proportionately the same number of new programs, they differed in the types of programs initiated. All of the 11 health programs and 11 of 13 data processing programs were started in vocational schools. On the other hand, the high schools set up 11 of the 12 programs in the miscellaneous category. This difference is probably the result of the facilities and instructors available to the different school types.

Comparison of schools with part-time students to those with no part-time students showed that both set up proportionately the same number of new programs. Some differences existed in the types of programs set up, but none were significant.

It is reasonable to expect that within the next few years the number of part-time course offerings will increase appreciably. The 1968 amendments to the Vocational Education Act of 1963 gave strong emphasis to work-study programs, and a large portion of the new funds have been earmarked by the federal government for use in establishing work-study programs which will consist of working one-half day and going to school one-half day.

When examining the relationship between city size and the number of programs established, proportionality was assumed as the null hypothesis, i.e., if the small cities constituted 39 percent of the total sample of cities, the schools in those cities should have set up 39 percent of the new programs.

The findings here indicate a positive relationship between city size and the number of new programs. The schools in large and medium sized cities established proportionately more programs than the schools in the small cities. This finding correlated with the conclusion in the previous section that compared school enrollment with number of new programs.

School Environment and Recommended Curricula

The directors and coordinators were asked to indicate the programs that they would recommend for initiation in the next few years. The 291 new programs recommended were classified by specific areas of study. Almost without exception, the proportion in each category was the same as the percentage in each category for the newly established curricula, demonstrating the desire of the directors and coordinators to further expand in the traditional areas of study. There were several notable exceptions. The large schools (most in the large cities) recommended expansion of health and service programs to a disproportionate degree. Further, large-school administrators recommended all of the 30 programs that fell into the miscellaneous category. The implication here is not clear. Are the large schools innovating more by setting up non-traditional programs, or are they able to set up an "esoteric" curriculum because they are large and have more instructors and funds? The data available do not indicate an answer.

Labor Market Information and the New Programs

On the average, 70 percent of the directors and coordinators indicated use of the data publications (excluding the WMO studies[1]) available for reference and advice. Only two of the 74 administrators reported that they used no labor market information before starting new curricula.

Seventy percent of the directors and coordinators used labor market statistics. When use of labor market statistics was compared with the new programs, a significant relationship was found (chi-square with 8 Df $= 16.088$, $p < .05$). Those administrators who indicated that they did not use any labor market statistics started a disproportionate number of programs in the general education and miscellaneous areas. All of those who established programs in data processing had used labor market statistics. Further, those who used labor market statistics established a disproportionate number of the new programs in the areas of service and health.

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[1] The use or nonuse of the Wisconsin Manpower Outlook studies showed no relationship with the number or type of new programs. Consequently they are excluded from this section of the study.

The area skill survey was the most widely used of the sources of labor market information; it was used by approximately 92 percent of the directors and coordinators. Statistical comparison of the use or nonuse of area skill surveys with the types of programs established indicated that they were independent. One observation is worth noting. Where programs in data processing and service were started, all of the directors and coordinators used area skill surveys. On the other hand, 75 percent of the new programs that fell into the miscellaneous category were set up in the schools where the director or coordinator did not use area skill surveys.

Some of the directors and coordinators indicated that they used publications other than those asked about in the questionnaire, and the use of other publications seems to be related to the types of programs set up by the schools. The 45 percent of the directors and coordinators who indicated that they used other publications set up a disproportionate number of programs in data processing and health. Further, those administrators who did not use any other publications set up a disproportionate number of the miscellaneous programs.

In sum, there appears to be a positive relationship between the use of data publications and the propensity to set up programs that train for white-collar occupations. However, the use or nonuse of data publications did not influence the number of programs set up in industrial maintenance and repair, which train mostly for blue-collar occupations.

Significance of Data Publications

After the directors and coordinators indicated use or nonuse of the data publications, they were asked to indicate the influence that the use had on the decision to start new programs. The most frequent responses are summarized in Table 24. The area skill survey was the only type of labor market information that the majority of the directors and coordinators believed was very important when starting new programs. The diversity of the responses seems to show that some of the directors and coordinators believed that the labor market information was extremely important while others believed it had little or no value. A study of the returned questionnaires shows that the majority of the administrators did not have much confidence in the data publications.

Table 24: Significance of Labor Market Publications

Significance	Labor Market Statistics	Occupational Outlook Handbook	Area Skill Survey	Other Publications
Great influence, very effective, essential, etc.	15	11	35	13
Little or no significance	11	16	2	6
Showed labor mkt. needs in general	13	7	3	0
Showed local labor market needs	3	0	13	6
Suggested curricula	3	5	3	4

Summary

A pattern emerges when the relationship between use of data publications and new programs is examined. Using data publications seems to have a positive influence on the establishment of new programs in the areas of data processing, service, and health, and a negative relationship with the initiation of miscellaneous programs. Seventy-eight percent of the new programs were in the areas of business and industrial maintenance and repair. Examination of the data shows that the use or nonuse of labor market information did not influence the number of programs started in these areas.

In sum, the observations lead to the conclusion that the directors and coordinators are aware of the main areas that should be expanded without referring to the labor market publications. The data publications seem to positively influence program expansion in areas outside of traditional vocational education curricula.

Further, the relationship of use of labor market publications to the programs recommended by the directors and coordinators follows the same pattern as the above discussion indicates for programs already established.

Projected Use of Labor Market Surveys

The directors and coordinators were asked to indicate the kind of survey data they would use in the future to determine the need for new curricula. The responses are summarized in Table 25. Almost one-third of the administrators stated that they would find out the need for new curricula from the WSES. This projected reliance on the advice of the WSES is odd in that only 3 percent of the directors and coordinators had actually used the WSES to determine if there was need for new programs or courses. Further, Table 25 shows that the directors and coordinators did not see any increase in the use of advisory committees. Twelve percent indicated use of advisory

Table 25: Projected Survey Use

Survey	Number	Percent
WSES data	29	33
Interview of local employer	17	19
Mailed questionnaire	12	13
Advisory committee	5	6
Other	26	29
Total	89	100

Note: Some of the directors and coordinators gave more than one answer; consequently the total is greater than 74.

committees. Twelve percent indicated use of advisory committees in the past while only 6 percent expected to use them for need-determination in the future. In general, the administrators seemed satisfied with procedures used in the past and did not foresee any changes in the future.

Role of Advisory Committees

The directors and coordinators were asked to indicate the role that the advisory committees played in the curriculum initiation process. The responses are summarized in Table 26.

Table 26: Role of the Advisory Committees in Curriculum Initiation

Role	Number	Percent
General advice	33	27
Recommend course content	27	22
Recommend equipment	19	15
Advice on local manpower needs	14	11
Help establish new curriculum	8	6
Public relations	7	6
Other	16	13
Totals:	124	100

Note: Some gave more than one response.

Rows 4 and 5 in Table 26 show that only 17 percent of the responses indicated that the advisory committees were used in the initial stages of curriculum establishment. Further, almost one-half stated that the advisory committees were used only for general advice or recommendation of course content (rows 1 and 2 in Table 26).

The role of advisory committees in the high schools was different from their role in the vocational schools. The relationship between role of advisory committee and the type of school was highly significant (chi-square with 6 Df = 26.418, $p < .001$). The high schools tend to use advisory committees more for recommending course content, general advice, and public relations. On the other hand, the vocational schools use advisory committees more for advice on local manpower needs and help in the establishment of a new curriculum.

These observations lead to the conclusion that the advisory committees in the vocational schools are involved in curriculum initiation much more than are the high school committees. In the high schools the committees are used for only "secondary"activities which supplement or lend support to the decisions of the coordinators.

Role of Instructors

The directors and coordinators were asked to indicate the role that the instructors played in the establishment of new curriculum. The responses were diversified and showed that the instructors were involved in curriculum initiation on a very small scale. Only 5 percent of the directors and coordinators indicated that the instructors recommended new courses and programs. The most frequent response was that the instructors gave "general advice."

Again the high schools and vocational schools differed. The high schools tend to use the instructors for recommending improvements in existing curricula, planning course content, and locating training facilities. The vocational schools tend to use the instructors for writing course specifications and general advice.

In sum, it must be concluded that the instructors, at least in the opinion of the directors and coordinators, play only a secondary or supplementary role in the initiation of a new curriculum.

CHAPTER VII

VOCATIONAL ADVISORY COMMITTEES AND CURRICULUM INITIATION

Local educational advisory committees have, for many decades, evaluated vocational school programs, tried to increase community interest in vocational education, and shaped the curricula. While all of these functions are important to vocational educators, a key role is that of helping determine new curriculum. Indeed, the reason for establishing advisory committees was to get direct feadback on the types of programs or courses needed in the schools.[1] What role do the advisory committees actually play? How strong is their influence in setting up new curricula? These questions are considered here.

The Advisory Council on Vocational Education states in its 1968 report, ". . . on the local level the old established ad hoc advisory committees have continued to give valuable assistance to the planning and administration of vocational education programs."[2] The validity of this statement in reference to the Wisconsin vocational advisory committees will be examined in this chapter.

As explained in the methodology chapter, 69 advisory committee chairmen were selected for interview and 61 of these interviews were completed by the

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[1] For a complete discussion of the functions and make up of advisory committees, see American Vocational Association, Vocational Advisory Committees, a report prepared by the Publications Committee of the A.V.A. (Washington: The Association, 1963).

[2] U.S. Office of Education, The Bridge Between Man and His Work (Madison: Center for Studies in Vocational and Technical Education, University of Wisconsin, 1968), p. 48.

University of Wisconsin Survey Research Laboratory. The responses to the questionnaire (see Appendix B) were coded, keypunched, and processed. Many of the items on the survey questionnaire were not answered. Further, the responses were not amenable to categorization because of lack of similarity. As a result, statistical analysis was not meaningful. However, the interviews did shed light on: (1) membership of the committees, (2) the role of the advisory committees in the curriculum initiation process, (3) frequency of committee meetings, and (4) committee use of labor market publications.

Membership of Advisory Committees

The members of the advisory committees came from many different walks of life. Table 27 summarizes the occupational areas of the members of the committees in Wisconsin.

Table 27: Membership of Advisory Committees by Occupations

Occupation	Number	Percent
Business	70	33
Union	22	10
Workers	47	22
Teachers	8	4
Foremen	6	3
WSES representatives	4	2
Other	56	26
Totals:	213	100

The makeup of the advisory committees did not differ substantially by size of school or by city size, but there were notable differences in the occupational backgrounds of the vocational and the high school committee members. The vocational schools had a disproportionate number of members classified as "workers"--30 percent as compared with only 15 percent of the high school members. Seven of the eight teachers serving on advisory committees were on high school committees. All of the schools having a representative from the WSES were vocational schools with an enrollment over 1,000. These findings support the previous analysis which showed that the high schools tend to stay within the educational system when looking for advice, whereas the vocational schools rely to a great degree on non-educators.

Advisory Committee Participation in Curriculum Initiation

The A.V.A. recommends that the advisory committees should be an integral part of the curriculum initiation process, especially for programs training for jobs in the skilled trades.[3] Table 28 summarizes the extent of participation of vocational advisory committees in curriculum initiation.

The most surprising finding is that little more than half of the advisory committee chairmen indicated that the committee took part in the planning and constructing of new curricula. Regretably, the questionnaire did not ask why advisory committees did not participate more extensively in this and other functions of the advisory staff. A possible explanation is

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[3] Vocational Advisory Committees, pp. 5-6.

Table 28: Advisory Committee Participation in Curriculum Initiation

	Yes	%	No	%	Total	
Planning and constructing new programs	35	(57)*	26	(43)	61	(100)
Planning and constructing short courses	18	(30)	43	(70)	61	(100)
Planning and updating existing programs	33	(54)	28	(46)	61	(100)

*Percent of row total in parentheses.

that they are active in the areas of public relations and facility acquisition; another is that they are doing little or nothing. On the other hand, Dufty concluded that the local advisory committees seemed to be the main channel of information on labor market needs.[4] A following section of this chapter will cast some doubt on this assertion.

To probe more deeply into the roles of the committees, the advisory committee chairmen were asked about their participation in the curriculum initiation process. A summary of the responses is shown in Table 29.

As seen in Table 29, the largest category of responses, as was common throughout the whole interview, fell into the "no comment" or "don't know" category. There is no ready explanation for this. However, a careful study of the returned interviews suggests that the chairmen did not answer certain questions for fear of revealing their relative impotence in relation to curriculum initiation. Of those who gave relevant answers, the largest number indicated that they served as consultants (row 1, Table 29). Certainly consultation is important when considering new programs, but the necessity of having a formal committee to perform this function is questionable. Further, only one chairman indicated that he played the role of initiator of new curricula.

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[4] Norman F. Dufty, "Program Initiation at Technical Institutes," Journal of Human Resources, 3 (Summer 1968), pp. 350-351.

Table 29: Role of the Advisory Committee Chairmen in Curriculum Initiation

	Number	Percent
Consultant	12	20
Suggest curriculum	6	10
Suggest course content	4	7
Advice regarding demand for workers	3	5
Initiate new curricula	1	2
Other	9	14
Inappropriate or "don't know"	26	42
Total:	61	100

Frequency of Committee Meetings

In order to get an indication of how active the advisory committees are, the chairmen were asked to state the number of committee meetings in the previous year. The answers revealed that, on the average, the committees met three times a year; the modal response was two times a year. Yet, several indicated that they met once every two weeks. The different frequency of advisory committee meetings in relation to the type of school is shown in Table 30.

The results of the comparison of school types with frequency of advisory committee meetings are somewhat surprising. In a previous section of this study (Chapter V), it was concluded that the advisory committees were more active and functional in the vocational schools than in the high

Table 30: Frequency of Committee Meetings
Classified by Type of School

	Number of Meetings			
	1	2,3, or 4	5 or more	Total
High school	2	20	7	29
Vocational school	14	15	7	36
Total:	16 (25)*	35 (54)	14 (22)	65 (100)

Chi-square with 2 Df = 9.06 ($p < .025$)

*Percent of row total is in parentheses.

schools. Yet, Table 30 shows that a disproportionate number of the vocational school committees met only once a year; on the average, the high school committees met more often. This may well be a function of the makeup of the committees. Since the vocational school committees had proportionately more members from outside the academic community, it was probably more difficult to schedule meetings. Then again, it seems reasonable to conclude that if the committees wanted to meet more than once a year, it could have been arranged.

Labor Market Publications

The interview form, in part, tried to find out the influence and use of labor market publications and the relationship of the use of these publications to the curriculum initiation process. Based on Dufty's observations and conclusion,[5] it seemed reasonable to expect that advisory committees would be well aware of the data available and would also relay this information to the school administrators. The responses showing the significance and use of various labor market publications are summarized in Tables 31 and 32.

Needless to say, the results shown in these tables are not surprising in light of previous indications of the degree of advisory committee involvement in curriculum initiation. Almost half of the chairmen did not answer or indicated "don't know" when asked the questions relating to labor market publications (Table 31). The only source of information used to any large extent was the area skill surveys. Further, as shown in Table 32, only a small percentage of the chairmen believed that the publications were significant. On the average, 84 percent of the chairmen responded inappropriately, stated "I don't know," or believed the data were not significant at all.

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[5] Ibid.

Related to the use of labor market information is whether or not the chairman was in contact with the WSES when his school was starting or discontinuing a curriculum. Twelve of the chairmen or about one-third of those who said that they took part in the planning and constructing of new courses or programs, stated that they were in contact with the WSES for various reasons.

A careful study of the returned interview forms reveals that approximately 20 percent of the advisory committees played an active role in curriculum initiation--certainly not an impressive showing in view of the fact that one of the expressed reasons for having advisory committees is to have them help in identifying the need for and in establishing new courses and programs.

Labor Market Needs and Recommended Curriculum

Almost 70 percent of the chairmen believed that the school programs were serving the labor market needs of the community, but when they were further questioned as to why they believed the needs were or were not being met, the responses were so vague and general that no categorization could be made. The best summary statement of the reasons given for indicating that the needs were being met is "nobody is complaining about placement problems."

Table 31: Use of Labor Market Data Publications to Determine Need of New Curriculum as Indicated by Advisory Committee Chairmen

Questions	Yes	%	No	%	D.K. or Inappro.	%	Total	
Was a survey used to determine need?	25	(41)	3	(5)	33	(54)	61	(100)
Were labor market statistics used?	11	(18)	22	(36)	28	(46)	61	(100)
Was the Occupational Outlook Handbook used?	3	(5)	30	(49)	28	(46)	61	(100)
Were area skill surveys used?	17	(28)	16	(26)	28	(46)	61	(100)
Were Wisconsin Manpower Outlook studies used?	4	(7)	29	(47)	28	(46)	61	(100)
Were other sources of information used?	14	(23)	19	(31)	28	(46)	61	(100)

Table 32: Significance of Various Labor Market Studies as Indicated by Advisory Committee Chairman

Significance	Highly Sig.	%	Sig.	%	Not Sg. D.K. or Inappro.	%	Total	
Labor market stats.	4	(7)	6	(10)	51	(83)	61	(100)
Occupational Outlook Handbook	1	(2)	2	(3)	58	(95)	61	(100)
Area skill surveys	11	(18)	6	(10)	44	(72)	61	(100)
W.M.O. publications	1	(2)	3	(5)	57	(93)	61	(100)
Other sources of data	6	(10)	8	(13)	47	(77)	61	(100)

The programs recommended for initiation by the chairmen were, to say the least, out of the mainstream of the traditional vocational-technical curricula. The courses and programs recommended by the chairman were grouped in the same way as were the recommendations of the directors and coordinators. Eighty-five percent (158 out of 183) of the curriculum recommendations of the chairmen fell into the miscellaneous category. When asked to indicate the reasons for their recommendations, the modal response (18 of the 61 responses) was "to fill labor market needs." The chairmen giving this response were, for the most part, the same ones who participated in the curriculum initiation processes of their schools. Further, only a small percentage of the advisory committees were really aware of the labor market needs and the responsibility that vocational education programs have in filling those needs.

An interesting addendum here is the response to the question, "Why wasn't the curricula that you recommended initiated in the past?" The modal response was "I don't know." Further, 67 percent of the advisory committee chairmen believed that the schools made "good use" of their advisory committees.

Summary

Certainly some advisory committees are well aware of the needs of the labor market and function actively in the curriculum initiation processes. But, in general, it must be concluded that most are inactive, ill acquainted with the needs of the labor market, not aware of the labor market data available for their use, not in contact with the WSES, and just "token groups."

CHAPTER VIII

VOCATIONAL-TECHNICAL INSTRUCTORS AND CURRICULUM INITIATION

In his study of a middle western technical institute, Dufty found that student demand was an important part of program initiation.[1] Teachers are in close contact with the students and act as the intermediary to the school administration. Further, the American Vocational Association stressed the importance of teacher contact with vocational advisory committees.[2] Finally, instructors are the nucleus of our educational system. In light of the above, it seemed reasonable to expect that vocational instructors would be involved in curriculum initiation in their schools.

To determine the extent to which faculty members are involved in curriculum initiation, a questionnaire (see Appendix C) was sent out to a randomly selected sample of 144 vocational education instructors. One hundred and two usable questionnaires were returned to the University of Wisconsin Survey Research Laboratory.

The complete questionnaires did not prove to be as useful as expected because they failed to elicit meaningful responses. The blame can be shared by the designers of the questionnaire whose questions were not penetrating enough and by the faculty members for their somewhat "haphazard" responses

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[1] Dufty, "Program Initiation at Technical Institutes," Journal of Human Resources, 3 (Summer, 1968), pp. 348-349.

[2] American Vocational Association, Vocational Advisory Committees (Washington: The Association, 1963).

(if they responded at all). Nevertheless, the responses did provide some insight into the role that the instructors play in (1) curriculum initiation, (2) improvements they believed to be necessary, (3) connections with advisory committees, and (4) the need for new programs.

This chapter will present a summary of the responses and the possible interpretations and implications of them.

Participation in Curriculum Initiation

Ninety percent (92 of 102) of the instructors stated that they participated in the construction and planning of new curricula. The responses are summarized in Table 33.

Table 33: Instructors' Responsibilities in the Construction and Planning of New Curricula

Responsibilities	Number	Percent
Help develop new curricula	27	(16)
Curriculum planning	36	(22)
Determine community needs	11	(7)
Work with advisory comm. and staff	16	(10)
Assist others	10	(6)
Select texts and help get facilities	15	(9)
Other	49	(30)
Total:	164	(100)

Note: The total is greater than 102 because some of the instructors gave more than one answer.

As seen in Table 33, only 38 percent of the instructors indicated direct participation in curriculum initiation (row 1 plus row 2). The percentage may be even smaller since some of the active instructors gave more than one answer. The 63 responses that indicated direct participation were very general (e.g., "plan" or "help develop") and really did not reveal whether or not the instructors were an integral part of the process.

Proposed Change in Procedures

The instructors were asked to indicate what they believed to be the most effective procedure to determine the need for new courses or programs. A summary of the responses is given in Table 34.

Table 34: Most Effective Procedure for Determining the Need for New Curricula as Indicated by the Instructors

Procedure	Number	Percent
Establish community need	54	(50)
Discussions	15	(14)
Advisory committee recommendation	11	(10)
Labor market data projections	5	(5)
Other	23	(21)
Total:	108	(100)

Table 34 shows that 50 percent of the instructors stated that the need should be determined by the wants of the community. Area, state, or national labor market needs were mentioned only twice--an indication that faculty concern is centered on the local scene. The responses of the directors and coordinators gave similar emphasis to the needs of the local labor market, but differed in the secondary responses. The directors and coordinators stressed local industry contact and WSES suggestions to a much greater degree than did the instructors. Further, the instructors indicated that discussion would be the most effective procedure to use to determine the need for new curricula. This response is reasonable since the instructors are able to participate to the greatest extent in the discussions about proposed curricula. In sum, the personnel connected directly with the school seem to be, first and foremost, concerned with the local needs. This concern is certainly understandable, as local manpower needs should be important to local educators. However, when the local labor market fails to elicit enough demand to give all of the graduates jobs, the local educators must be knowledgeable about the needs in other labor markets in order to insure the graduates of jobs related to their vocational training.

Further, the instructors indicated what they believed could be done to improve the process used in curriculum initiation. The responses are summarized in Table 35. The mentioned improvements reveal no pattern or specific emphasis: over 70 percent of the responses fell into the "no comment" or "other" category. Many of the "other" responses were complaints about the lack of power the instructors had in the determination of new courses and programs.

Table 35: Instructors' Suggested Improvements in the Curriculum Initiation Process

Improvements	Number	Percent
Better guidance personnel	7	(7)
Spend more time on community needs	11	(11)
Better use of advisory committees	6	(6)
School-industry coop work programs	3	(3)
Other	50	(52)
No comment	21	(21)
Totals:	98	(100)

Notable here is that three of the instructors indicated that school-industry work-study programs would improve the school curriculum. In 1968, school-industry co-op programs were emphasized in the amendments to the Vocational Education Act of 1963.

Reflective of the instructors' dissatisfaction with the initiation procedures, only 33 percent indicated that the present programs met the needs of the local labor market. In contrast, 70 percent of the advisory committee chairmen believed that the present school programs met the needs of the local labor market (see Chapter VII).

Advisory Committee Connections

The instructors were asked whether or not they were invited to attend advisory committee meetings. The responses were as follows: 68 indicated "regularly invited," seven indicated "occasionally invited," and 16 said they were never asked to attend. These responses, showing that over 80 percent of the instructors were invited to attend advisory committee meetings, can be misleading without knowledge of the extent of their participation in these meetings. Only eight of the 91 respondents indicated that they participated fully in the proceedings of the advisory committee meetings which dealt with program initiation (and as shown in Chapter VII, the number of meetings dealing with curriculum initiation were certainly not numerous). Most indicated that they participated as "onlookers," "discussants," or "program content consultants." Certainly these roles can be an important aspect of advisory committee meetings.

Recommended Programs

The instructors were asked what programs they would like to see added to the school curriculum and to give the reasons for their recommendations. The courses and programs recommended by the instructors were grouped in the same way as the recommendations of the directors and coordinators. Table 36 summarizes these recommendations.

The table shows that the recommendations were mostly within the traditional areas of vocational-technical studies and not "miscellaneous" as were those of the advisory committee chairmen (85 percent of the advisory committee recommendations were "miscellaneous" whereas only 44 percent of the instructors' recommendations were "miscellaneous").

The reasons given by instructors for wanting new courses and programs were as diversified as the recommendations. The two most frequently given reasons were "my knowledge indicates a need for this course or program" and "this course or program would benefit the students." These responses are obviously very general and tell little about the logic underlying the recommendation. It seems probable that these recommendations largely reflect student requests or suggestions.

Table 36: Instructors' Recommended Curricula

Course or Program	Number	Percent
Business	54	21
Industrial maintenance and repair	39	15
Service	10	4
Health	10	4
Data processing	9	4
Graphics and applied arts	8	3
General education	6	2
Agriculture and home economics	6	2
Miscellaneous	114	45
Totals:	256	100%

Summary

If nothing else, the questionnaires showed that the instructors do not play a very important role in the curriculum initiation process. This generalization correlates with the statements made by the directors and coordinators referring to the instructors role in the process--minimal.

CHAPTER IX

REVIEW OF FINDINGS AND POLICY RECOMMENDATIONS

The aim of this study has been to identify and evaluate the factors influencing curriculum initiation in vocational programs in Wisconsin. The analyses presented in the preceding chapters have led to a number of findings which shed light upon the questions and hypotheses posed in the Introduction. Once again, these questions are:

(1) What are the procedures presently employed in the initiation of public vocational and technical curricula?
(2) How effective are these procedures?
(3) What factors influence the curriculum initiation procedures?

This chapter will summarize the findings of this study. In addition, policy recommendations in the area of curriculum initiation will be presented.

Labor Market Publications

The review of the available labor market information revealed that it was lacking in both quality and quantity. The publications put out by the WSES were found to be grossly inaccurate in projecting labor market needs. School administrators placed little confidence in them; only a minority of the administrators stated that they used them. Hopefully, the new "Data, People, Things" series will provide accurate and usable data on present and future needs of the state labor market. However, optimism is not warranted, as a review of preliminary publications in the new series indicates that no change has been made in research methods employed.

The publications of the federal government fared better than did the WSES publications among the vocational educators. Seventy percent of the directors and coordinators indicated that they used labor market statistics. Area skill surveys were used by approximately 90 percent of the directors and coordinators, and the Occupational Outlook Handbook was employed by 64 percent of the administrators. The data supplied in the OOH seem to be the most accurate, but are not specific enough to be translated to local needs. Further, area skill surveys (not necessarily the WSES product) were the only source of labor market information that a majority of the directors and coordinators thought to be a significant influence on curriculum initiation. Finally, the use or nonuse of labor market data did not appear to influence the number and type of new curricula established.

It must be emphasized that, even though the quality of the data is not "good," the educators who use the available data will be better equipped than the nonusers to initiate curricula relevant to the needs of the labor market.

Determination of Need for New Curriculum

The first step in the initiation of new curricula is determining whether a need for a new program exists. Educators differ in their methods for ascertaining the need for new programs. In general, educators who were from large vocational schools with some part-time students indicated that the local business community provided information demonstrating the need for new curricula. In contrast, administrators from small city high schools tended to rely on the WSES and the availability of funds for expansion as the indicators of the need to expand. Further, when the directors and coordinators were asked to indicate what they believed to be the most effective procedure to use in determining the need for expansion, almost half mentioned local surveys. Thus a discrepancy exists between what procedures the administrators believe to be effective and the procedures they actually use.

In conclusion, it seems as if the high school administrators tend to stay in the educational and public service cadres when determining need, whereas the vocational school administrators tend to use local industry as the catalyst in the initiation of new curricula. Also noteworthy is the finding that only a small percentage of the educators relied on long-range projections of manpower needs. The great majority relied on area skill surveys and local industry suggestions which really indicate only the short-run needs of the local labor market.

Reasons for Starting New Curricula

While the demand for occupationally trained manpower accounted for 65 percent of the new courses and programs initiated, a wide spectrum of reasons was indicated for the other 35 percent of the new curricula. Twenty-one percent were started because of public demand (including student requests), 5 percent to upgrade workers, and 4 percent for miscellaneous reasons.

The sources of advice used by the vocational administrators also varied widely. Twenty-five percent of the directors and coordinators stated that they initiated the new programs on their own. For 17 percent of the new programs, advisory committees were the source of advice, while the WSES advised for 12 percent of the new curricula. Published information was indicated as the source of advice for only 4 percent of the new curricula. The Wisconsin Board of Vocational, Technical, and Adult Education was cited as an advisor in only a few instances and the Department of Public Instruction was never mentioned. Apparently, the high school administrators receive no advice from their state headquarters.

Schools with different environmental characteristics varied in their choice of advisors. School administrators who tended to rely on local industry and advisory committees were for the most part, from autonomous vocational schools located in large and medium sized cities and with relatively large enrollments, including some part-time students. In contrast, administrators who relied upon school staff and public services for advice tended to be from small high schools located in the smaller cities and with no part-time vocational students.

In sum, it can be concluded that directors and coordinators were not consistent in their use of advisors, but rather took the advice which was most readily available. When none was present, they did as they thought best and listed themselves as the source of advice. Certainly, reliance on the WSES and the Wisconsin Board of Vocational, Technical, and Adult Education was minimal, as was reliance on local advisory committees.

Similarity of New Curricula to Old

The degree of similarity of new curricula to the existing programs was taken as an indication of the administrators' willingness or unwillingness to branch out into new areas of study. In the large city schools, 82 percent of the new programs were similar to the old, whereas in the small schools (mostly in small cities) only 39 percent of the new programs were similar to the existing curricula. These results may not really indicate the unwillingness of the administrators to widen the spectrum of curriculum, but may in fact be a function of the rate of growth of the schools involved. If the large schools in the larger cities are growing at a faster rate than the small schools, it would necessitate the establishment of programs in the traditional areas in order to meet the demands of the students and the local labor market.

A relationship between source of advice and the similarity of new curricula to old was present. Administrators who stayed within the educational system when seeking advice tended to set up curricula in the same areas as the existing programs. In contrast, administrators who relied upon industry and the State Board as advisors set up proportionately more dissimilar programs. However, use or nonuse of labor market information had no effect on the degree of similarity of the new curricula.

Anticipation of Placement Problems

Very few of the directors and coordinators believed that any problems occurred in placing graduates in jobs. Administrators who did expect placement problems were, for the most part, from small city high schools.

and their expectation doubtless was a function of the amount and type of industry in their communities. Particularly interesting here is that the directors and coordinators who did anticipate placement problems expressed no desire to supply information on mobility to the graduates. The reasons given for this negative attitude toward mobility centered on the fact that the local populace desired to keep their youth in the community so as not to increase the rising rate of out-migration. Ties to the home environment seemed to override the prospect of certain employment in areas with tight labor markets.

New Curricula

The great majority of the new courses and programs were in the areas of business and industrial maintenance and repair. In these two major areas, both the vocational and the high schools set up proportionately the same number of new programs. But in the other areas of expansion, the two types of schools differed. Eleven of the 13 programs set up in data processing and all 11 new programs relating to occupations in health and service were set up in the vocational schools.

Further, a positive relationship exists between school size and the number of programs established. The large schools expanded program offerings at a much greater rate than did the small schools. Again, this may be a function of the rate of growth of enrollment which is faster in the large schools located in metropolitan areas. This hypothesis is buttressed by the fact that the large schools set up more programs in the traditional areas of vocational study.

Finally, the recommended courses and programs did not differ from the already established curricula, which seems to show that the directors and coordinators were satisfied with the present curriculum areas in the school and saw no need to adjust to new demands of the labor market.

Advisory Committees

Most of the directors and coordinators stated that the advisory committees were really not an integral part of the curriculum initiation process, an opinion supported by the responses of the advisory committee chairmen. Only 10 percent of the advisory committee chairmen interviewed stated that they suggested new curricula, and only little over half of the chairmen stated that they were involved at all in the planning and construction of new curricula. Most of the chairmen participating acted as consultants to the school administrators who assumed the bulk of the responsibility for program expansion.

On the average, the advisory committees met three times a year. The high school committees, on the average, met more frequently than the vocational school committees. Differences in the membership composition of advisory committees and other indicators of committee activity tend to obscure the conclusion that advisory committees in high schools were more active than those in vocational schools. The high school advisory committees were composed mostly of people who were part of the educational system, whereas the vocational school committees had more members from the local business community. Consequently, meetings were easier to arrange in the high schools. Furthermore, the administrators from the vocational schools tended to rely on advisory committee advice to a greater extent than did the high school administrators. This seemingly better contact between vocational school administrators and their advisory committees may be the result of frequent informal contacts rather than formal advisory committee meetings.

In sum, it is not clear whether the high school or vocational school administrators make better use of advisory committees, but it is clear that all the vocational advisory committees in Wisconsin are under-employed by vocational educators.

Vocational Instructors

Most of the faculty members who responded to the questionnaire played only a minimal role in curriculum initiation. Only 8 percent indicated that they participated directly in the processes of program initiation.

General Conclusions

Certain broad conclusions can be drawn from this investigation. Curriculum initiation in public vocational programs in Wisconsin is an unstructured procedure. The rationale behind and the methods used to initiate new courses and programs are haphazard for the most part. The autonomy of the local schools probably is a function of tradition and necessity--tradition, because until the Manpower Development and Training Act of 1962 and the Vocational Education Act of 1963, there were no formal requirements that had to be adhered to when starting new curricula. Even though the requirements now exist, it seems as though the local administrators set up advisory committees and take local surveys simply to appease the state headquarters and buttress their curriculum decisions. The Wisconsin Board of Vocational, Technical, and Adult Education and the WSES seem to give "rubber-stamp" approval to local curriculum decisions which fulfill the established requirements. Their advisory assistance is minimal, possibly because, theoretically, the State Board adheres to a philosophy of local autonomy; this autonomy, however, seems to be present only until the final approval stage of the curriculum initiation processes. In recent years the guidelines for establishing new programs have become more involved and strict. The schools must follow procedures outlined under the Manpower Development and Training Act and the Vocational Education Act which call for estimates of student interest, local surveys, local advisory committee consultation, and the filling-out of myriad forms. In a conversation with Donald M. Brill,[1] the author was informed that a large number of requests from the local vocational schools to set up new programs were turned down by the State Board. He stated that the reasons for refusal ranged from what appeared to be a lack of need to lack of funds.

Local autonomy is a function of necessity because no centralized office for manpower advice exists in Wisconsin. The WSES and the Wisconsin Board of Vocational, Technical, and Adult Education provide only sporadic advice to the local schools. The labor market data provided were not accurate, and, in any case, were not employed by the school administrators. This is not to say that local autonomy is completely dysfunctional. Adaptability and a certain degree of local autonomy are two characteristics of the process that should not be lost. The following section will attempt to integrate the existing flexibility of program initiation with some concrete recommendations for improvement of the present procedures.

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[1] Donald Brill, Supervisor, Vocational and Adult Education Research Unit, WBVTAE. Telephone conversation, April 2, 1969.

Policy Recommendations

This study brought to the fore several important shortcomings of the present system of program initiation in public vocational schools:

(1) Data relating to manpower needs are not accurate and in any case, are not used by school administrators.

(2) The sources of advice employed by vocational educators have no commonality; school administrators often do not even seek advice.

(3) Local vocational advisory committees are almost all impotent regarding curriculum initiation.

On December 23, 1965, a Task Force headed by George P. Shultz submitted to the Secretary of Labor a special report on the Employment Service.[2] A section of this report called for the Employment Service offices around the country to serve as Manpower Service Centers by controlling all manpower programs in an area and to function as centers of labor market information for a state, area, or city. Specifically, the report called for the Employment Service to "collect and disseminate information concerning present and future trends in the labor market and in the quality of the labor force."[3] Although the report failed to mention any formal connection between the recommended manpower service center and the educational system, the author feels that an alliance of this sort would greatly benefit the public educational system.

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[2] At the time Shultz was Dean, Graduate School of Business, University of Chicago; at present he is the U.S. Secretary of Labor. The full text of this report can be found in Employment Service Review, 3 (February 1966).

[3] "Placement and Counseling: The Role of the Employment Service," in Toward a Manpower Policy ed. R.A. Gordon (New York: John Wiley & Sons, Inc., 1967) p. 148.

Since Shultz is now Secretary of Labor, it seems feasible that the recommendations of the Task Force may well be implemented in the near future. The WSES should exert pressure on the Secretary to reorganize the Employment Service to include a central manpower office. The Wisconsin Board of Vocational, Technical, and Adult Education and the Wisconsin Department of Public Instruction should also lend support to this reorganization. If in fact the recommendations of the Task Force are implemented, which is likely, the Department of Public Instruction and the Wisconsin Board of Vocational, Technical, and Adult Education should strive to establish a formal alliance with the manpower services center. This alliance would give the school systems a central headquarters from which the local schools could obtain information on the present and future needs of the labor market, thus eliminating the haphazard way information is now obtained. This alliance would also bring together the various research activities which each of the state agencies now carry on individually. Hopefully, this reorganization would also bring about a drastic change in the research methods now employed by the state agencies since the methods now used by the Employment Service are not of the quality necessary to produce reliable labor market information.

Communication between the manpower center and the schools would facilitate the transfer of reliable information in both directions concerning the conditions and needs of the labor market. The school administrators could give students advice relating to the needs in the job market, and the manpower centers could provide information as to what courses and programs would be most advantageous to establish in the schools. Thus, the already overburdened school administrators would be relieved of the task of finding out the needs of the labor market, while at the same time more reliable data would be provided. Moreover, since vocational advisory committees can really do no harm and may possibly do some good, the schools could continue to use them and could check the validity of their recommendations for new curricula with the director of the manpower information center.

In sum, the alliance of the state education agencies with the recommended manpower center would retain the flexibility of the present program initiation procedures and certainly would add to the quality of the information available. In addition,the manpower headquarters could supply information regarding the availability of instructors and the facilities required to implement new programs. Certainly there are many obstacles to the establishment of this program, but the idea of a central manpower headquarters is well worth consideration by the state educational agencies as well as by the WSES and the U.S. Department of Labor.

In the interim, the author recommends that the public vocational system again instruct the local schools as to how vocational advisory committees can become more functional and useful. The State Board of Vocational, Technical, and Adult Education as well as the American Vocational Association have issued pamphlets outlining procedures for recommended activity of vocational advisory committees. The results of this study make it obvious that these procedures have not been followed. The State Board should again send these pamphlets, along with explanatory notes, to all the vocational administrators in Wisconsin.

By July 1966 all state vocational agencies had signed agreements for cooperative relationships with the WSES. These arrangements for cooperation at the local level are still merely "paper" agreements and have not as yet been implemented. A change in research techniques and possibly research personnel at the WSES in conjunction with active cooperation between the WSES and the local schools would substantially improve the processes of curriculum initiation in the Wisconsin schools offering vocational programs.

The training of youth in skills that will be valuable to them now and in their later working lives is one of the paramount functions of our educational system. In our rapidly changing society, it is an arduous task.

Appendix A

THE UNIVERSITY OF WISCONSIN
Madison, Wisconsin 53706

Center for Studies in Vocational
and Technical Education
Social Science Building

Fall-Winter, 1966-67

Dear Sir or Madam:

The Center for Studies in Vocational and Technical Education of The University of Wisconsin is conducting a survey to gather information regarding initiation of new programs and courses in Vocational and Technical Schools.

Professional interviewers on the staff of the Survey Research Laboratory at the University will take personal interviews with Directors of Vocational-Technical and Adult Schools and Co-ordinators of high school programs, and also a short telephone interview with a randomly selected sample of Advisory Committee members throughout the state. In addition, a questionnaire will be sent to each full time instructor in all of the high schools, and to the co-ordinators and teacher co-ordinators in the Vocational-Technical and Adult Schools. This questionnaire will be mailed back to the Survey Research Laboratory on the Madison campus.

An interviewer will telephone you within the next week or so.

These interviews are completely confidential. This is a statistical study and no names will be used in any report. On the basis of past experience we think we can safely say that you will enjoy this interview.

Sincerely,

Gerald G. Somers   J. Kenneth Little
Co-Directors,
Center for Studies in Vocational and Technical Education

A Division of the Industrial Relations Research Institute

__________ Office Number
Project 268
Fall-Winter, 1966-67

The University of Wisconsin
University Extension
Survey Research Laboratory
126

STUDY OF VOCATIONAL AND TECHNICAL SCHOOLS

School Directors and Coordinators

NAME OF SCHOOL ____

ADDRESS ____

____

1. What is the total enrollment at present? __________
2. How many males are enrolled? __________
3. How many females are enrolled? __________
4. How many students are less than 20 years old? ________ 20 to 30? ________
   31 to 40? ________ 41 to 50? ________ Over 50? ________
5. How many are not residents of your community? __________
6. How many of your students are part-time? __________
7. Title and description of full-time programs started after January 1, 1964. (We define a course as a single subject which is a part of a program of study. A program is a series of courses which lead to a certain occupation.)

	Title	Description
Program 1		
Program 2		
Program 3		
Program 4		
Program 5		
Program 6		

(CONTINUED ON BACK)

	Title	Description
Program 7		
Program 8		
Program 9		
Program 10		
Program 11		
Program 12		
Program 13		
Program 14		
Program 15		
Program 16		
Program 17		
Program 18		
Program 19		
Program 20		
Program 21		
Program 22		
Program 23		
Program 24		
Program 25		

__________ Office Number
Project 268
Fall-Winter, 1966-67

The University of Wisconsin
University Extension
Survey Research Laboratory

STUDY OF VOCATIONAL AND TECHNICAL SCHOOLS

School Directors or Coordinators

1. What position do you hold in this school? ____________________

2. Would you please describe your responsibility and function in the establishment of vocational education courses and programs? ____________________

____

____

____

____

3. Have any new courses or programs been established, or re-established, since January 1, 1964?

/Yes/ ↓ /No/ (GO TO Q 4)

3a. In what ways did these programs or courses originate? ____________________

____

____

____ ____________________

____

3b. Why did you decide to offer these programs or courses? ____________________

____

____

____

____

____

Interviewer's Name: ____________________ Your Int. No.: ______

Date: ____________________ Time Started: ____________________

3c. Was a local, state, or national labor market survey used to determine the need for such programs or courses?

/Yes/ ↓ /No/ (GO TO Q 3e)

3d. Can you describe the sample and methodology used in this survey?

/Don't know/, or ____________________

____

____

3e. Listed on this card are several sources of data which are available to school officials who are considering new programs or courses. Will you please tell me which, if any, of these you utilized before you decided to establish the new programs or courses? (SHOW CARD 1)

✓	CARD 1
____	A. Labor market statistics
____	B. Occupational Outlook Handbook
____	C. Area skill needs surveys
____	D. Other: (SPECIFY) ____________________
____	E. None

(IF ANY ITEMS "A" THROUGH "D" CHECKED IN Q 3e, ASK NEXT Q)

3f. Now, for each of the sources you named, will you evaluate their significance in influencing the decision on the programs or courses?

A. ____________________

B. ____________________

C. ____________________

D. ____________________

(GO TO Q 3h)

(IF ITEM "E" CHECKED IN Q 3e, ASK NEXT Q)

3g. Why did you not use any of these sources? ____________________

____

____

(GO TO Q 4)

3h. Did you contact or work with the State Employment Service while establishing these curricula or programs?

/Yes/ /No/

3i. What type of information did you receive?

___

___

___

3j. Why did you decide not to?

___

___

___

3k. Are these new courses similar to previously existing or present courses?

/Yes/ /No/ (GO TO Q 3m)

31. If this is the case, why did you feel that they should be added to your curriculum? ___

___

___

3m. How about placing the graduates of these programs--do you anticipate any problems?

/Yes/ /No/

3n. Why do you say so? ___

___

___

(GO TO Q 5)

4. Assuming you were to establish a new course or program, would a local, state, or national labor market survey be made to determine the need for such a course or program?

/Yes/ /No/

4a. What would be the scope, sample, and methodology used in these surveys?

___

___

___

4b. Why not? ___

___

___

___

___

4c. Listed on this card are several sources of data which are available to school officials who are considering new programs or courses. Will you please tell me which, if any, of these you would utilize before you decided to establish the new programs or courses? (SHOW CARD 1)

✓ CARD 1

___ A. Labor market statistics

___ B. Occupational Outlook Handbook

___ C. Area skill needs surveys

___ D. Other: (SPECIFY) ___________

___ E. None

(IF ANY ITEMS "A" THROUGH "D" CHECKED IN Q 4c, ASK NEXT Q)

4d. Now, for each of these sources you named, will you evaluate their significance in influencing the decision on the programs or courses?

A. ___________

B. ___________

C. ___________

D. ___________

(GO TO Q 4f)

(IF ITEM "E" CHECKED IN Q 4c, ASK NEXT Q)

4e. Why would you not use any of these sources?

____

4f. Would you contact or work with the State Employment Service while establishing new curricula or programs?

/Yes/ ↓ /No/ ↓

4g. What type of information would you receive?

____

____

____

4h. Why would you not contact them?

____

____

____

(GO ON TO NEXT PAGE)

ALL RESPONDENTS

Listed on this next card are ten labor market studies. Would you please answer the following questions relating to each study? (SHOW CARD 2)

CARD 2	Q5 Aware?	Q6 Received?	Q7 Read?	Q8 Used?
1. "Wisconsin Manpower Outlook - Managerial, Professional and Semi-Professional Occupations, 1961-1966." Also titled "Wisconsin Manpower Outlook, Individual Occupation Reports, 1961-1966."				
2. "Wisconsin Manpower Outlook - Teachers, 1961-1966."				
3. "Wisconsin Manpower Outlook, 1962-1967--Summary Report of Manpower Needs in Clerical, Sales, Service, and Skilled Occupations."				
4. "A Study of Health and Related Service Occupations in Wisconsin, 1963-1965."				
5. "Wisconsin Manpower Outlook--Summary Report of a Survey of Skilled Manpower Requirements and Training Resources in Milwaukee County 1958-1963."				
6. "Wisconsin Manpower Outlook, Racine County, 1957-1962."				
7. "Wisconsin Manpower Outlook, Brown County, 1959-1965."				
8. "The Inter-agency Study of Manpower Requirements, Training Resources, and Educational Needs for Marathon County, 1959-65."				
9. "Wisconsin Manpower Outlook--Summary Report of a Survey of Skilled Manpower Requirements and Training Needs in Manitowoc and Calumet Counties, 1959-1965."				
10. "Manpower Resources of Polk County, Wisconsin, 1964-1969."				

INTERVIEWER: ASK Q'S BELOW FOR EACH ITEM ON CARD 2.

5. (Looking at Item #1...) Were you aware that such a study had been made? (RECORD "YES" OR "NO" ABOVE. IF "NO," DO NOT ASK Q's 6 THROUGH 10; BUT GO ON TO NEXT ITEM ON CARD 2, UNTIL ALL ITEMS ARE COVERED.)

6. Did you receive this labor market study? (RECORD "YES" OR "NO" ABOVE)

7. Did you read it? (RECORD "YES" OR "NO" ABOVE)

8. Did you use this report in course establishment? (RECORD "YES" OR "NO" ABOVE)

(IF R RECEIVED, BUT DID NOT USE STUDY, ASK Q BELOW AND RECORD ANSWER OPPOSITE APPROPRIATE NUMBER, CARD 2)

9. What were your reasons for not using this study in course establishment?

Item #, Card 2

1 ____________________

2 ____________________

3 ____________________

4 ____________________

5 ____________________

6 ____________________

7 ____________________

8 ____________________

9 ____________________

10 ____________________

(IF R USED STUDY, ASK Q BELOW AND RECORD ANSWER OPPOSITE APPROPRIATE NUMBER, CARD 2)

10. Will you please give me the title or a description of the course(s) for which you used this study?

Item #,
Card 2

1 ____________________

2 ____________________

3 ____________________

4 ____________________

5 ____________________

6 ____________________

7 ____________________

8 ____________________

9 ____________________

10 ____________________

11. Do you utilize advisory committees to recommend new programs or courses?

/Yes/ ↓ /No/ (GO TO Q 12)

11a. Who usually serves on these committees--not just the names--but the positions of the committee members? ____________________

____

____

11b. What role does this committee play? ____________________

____

____

11c. About how many times does a committee meet in order to complete their work in course establishment? ____________________

12. Will you trace, in chronological order, the procedures you use in establishing new courses? ____________________

____

____

____

13. What do you consider to be the most effective procedure for determining the need for new programs or courses in vocational education? ____________________

____

____

____

____

14. What improvements would you suggest in the procedures now utilized in your school or area? ____________________

____

____

____

15. What new programs or courses would you suggest adding to your school program?

/None/, or ____
(GO TO Q 16)
____
____

15a. Why would you like to see these programs or courses added?

____
____
____

16. Do you feel that the courses now being offered by your school are serving the national, state, or community labor market needs?

/Yes/ /No/ /Depends/ /Not sure/

17. Why do you say so? ____
____
____

18. I have one question now concerning the establishment of short courses. For the purposes of this study, we are defining a short course as being a prescribed subject or activity usually completed within a school term. Will you trace the procedures used in establishing short courses?

____
____
____

19. What new courses or programs have been established since January 1, 1964? (RECORD BELOW)

/None/
(TO Q 20)

COURSE OR PROGRAM	Q19a Why started?	Q19b On whose advice?	Q19c Reaction?
1st			
2nd			
3rd			
4th			

(ASK Q's BELOW FOR EACH COURSE OR PROGRAM ESTABLISHED SINCE JANUARY 1, 1964 AND RECORD ON PAGE 10)

19a. Why was this course or program started? (RECORD ON PAGE 10)

19b. On whose advice, if any, was it initiated? (RECORD ON PAGE 10)

19c. Was the reaction of local management, labor, and students favorable, mixed, or unfavorable? (RECORD ON PAGE 10)

20. What is the role of the instructor in establishing new courses or programs?

____

____

21. Have you discontinued any courses or programs since January 1, 1964?

/Yes/ ↓

/No/ (GO TO Q 22)

21a. What courses or programs were discontinued? (RECORD BELOW)

Q21a COURSE OR PROGRAM	Q21b Why discontinued?	Q21c On whose advice?	Q21d Reaction?
1st			
2nd			
3rd			
4th			

(ASK Q's BELOW FOR EACH COURSE DISCONTINUED)

21b. Why was this discontinued? (RECORD ABOVE)

21c. On whose advice, if any, was it discontinued? (RECORD ABOVE)

21d. Was the reaction of local management, students, parents, and vocational education instructors favorable, mixed, or unfavorable? (RECORD ABOVE)

22. Are there any additional comments you would like to make? ________________

____

____

23. What is your reaction to this kind of an interview?

INTERVIEWER'S SUPPLEMENT

Time interview ended:

THUMBNAIL SKETCH

Appendix B

____________ Office Number
Project 268
Fall-Winter, 1966-67

The University of Wisconsin
University Extension
Survey Research Laboratory

STUDY OF VOCATIONAL AND TECHNICAL SCHOOLS

1. In this survey we are interested in finding out how members of Advisory Committees of Vocational and Technical Schools throughout the state feel about new courses and programs to be established in local schools. Let me ask you first whether or not you participate in the planning and construction of new courses and programs?

/Yes/ ↓ /No/ ↓

1a. In what ways are you involved?

____

____

____

1b. Why are you not involved? ____

____

____

____________ (GO TO Q 2)

↓

1c. What specific responsibilities do you assume in this function? ____________

____

____

2. How about "short" courses? For the purposes of this study we are defining a "short" course as a prescribed subject or activity usually completed within a school term. Do you participate in the construction and planning of such courses?

/Yes/ ↓ /No/ ↓

2a. What is your role in this?

____

____

2b. Why is this? ____________

____

____________ (GO TO Q 3)

↓

2c. What specific responsibilities do you assume in this connection? ____________

____

____

Interviewer's Name: ____________ Int. No.: ________

Date: ____________ Time Started: ________

3. Was the advisory committee in contact with the State Employment Service while establishing the programs?

/Yes/ /No/

4. Do you feel that the courses now being offered by your school(s) are serving the national, state, and community labor-market needs?

/Yes/ /No/

5. Why do you say so? ______________________________

6. What new programs or courses would you like to see added to your school(s) program?

/None/, or ______________________________
(GO TO Q7)

6a. Why would you like to see this (these) added? ________________

7. What improvements would you suggest in the procedures for establishing new programs in your school(s)? ________________

8. Are there any additional comments you would like to make about new programs and courses in Vocational Education? ________________

9. In your opinion does the school administration make good use of the advisory committee?

/Yes/ /No/

10. Why do you say so? ______________________________

____

____

11. What is your reaction to this kind of an interview? ______________________________

____

____

____

Appendix C

__________Office Number
Project 268
Fall-Winter, 1966-67

The University of Wisconsin
University Extension
Survey Research Laboratory

STUDY OF VOCATIONAL AND TECHNICAL SCHOOLS

Dear Faculty Member:

The Center for Studies in Vocational and Technical Education is conducting a survey through the Survey Research Laboratory which is concerned with evaluating the methods used in the constructing and planning of new courses and programs in Wisconsin's Vocational and Technical education programs.

As a part of this study, we are interested in the extent to which faculty members are involved in these decisions. This questionnaire has been designed to give us an understnading of the role played by instructors in this connection.

When you have completed the questionnaire, we would like you to place it in the postage paid, self addressed envelope and mail it to us.

Your answers will be held in complete confidence and the report which will be written will never identify any individual or school. There will be no "feed back" to directors or administrators except on the basis of overall responses from teachers in schools all over the state which will be a part of the final study report.

With this assurance, we hope that you will give honest and carefully considered answers to the questions.

Sincerely,

Gerald G. Somers J. Kenneth Little
Co-Directors
Center for Studies in Vocational-Technical Education

1. What position do you hold in this school? ______________________________

2. Do you participate in the construction and planning of new courses and programs?

/Yes/ ↓ /No/ (GO TO Q3)

2a. Please explain what your responsibilities are in this function, both formal and informal. ______________________________

____

3. Are you regularly invited to attend advisory committee meetings, are you invited to attend only occasionally, or are you never invited to attend advisory committee meetings?

/Regularly invited/ /Occasionally invited/ /Never invited/ (GO TO Q4)

↓ ↓

3a. To what extent do you participate in these meetings? ______________

____

____

4. Courses taught in vocational and technical schools are set up to serve labor market needs on a national, state, and community level. Do you feel that the courses you teach meet the needs of all, or only part, of these markets?

/All/ /Only part/

↓ ↓

4a. Why do you feel this way? _____

____

____

____

4b. Why do you feel this way? (Please explain which market(s) you feel are not served and comment on this (these) as well as on the market(s) you think your courses do serve.)

____

____

____

5. Are there new programs or courses you would like to see added to your school program?

/Yes/ /No/

↓ ↓

5a. What programs or courses would you like to see added?

____

____

____

5c. Why is this? ______________

____

____

____

(GO TO Q6)

5b. Why would you like to see the above added to your school's program?

____

____

6. What do you consider to be the most effective procedure for determining the need for new programs or courses in vocational education? ______________

____

____

____

7. What improvements do you think could be made in the procedures now utilized in your school? ______________

____

____

____

8. Are there any additional comments you would care to make on the subject of introducing new courses and programs in vocational education?

____

____

____

____

9. What is your reaction to this kind of a questionnaire? ______________

____

____

____

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